

Managerial Accounting, 16e (Garrison)

Chapter 2 Job-Order Costing: Calculating Unit Product Costs

- 1) A cost driver is a factor, such as machine-hours, beds occupied, computer time, or flight-hours, that causes direct costs.
- 2) Job-order costing systems often use allocation bases that do not reflect how jobs actually use overhead resources.
- 3) An employee time ticket is an hour-by-hour summary of the employee's activities throughout the day.
- 4) The formula for computing the predetermined overhead rate is:
Predetermined overhead rate = Estimated total manufacturing overhead cost ÷ Estimated total amount of the allocation base
- 5) Generally speaking, when going through the process of computing a predetermined overhead rate, the estimated total manufacturing overhead cost is determined before estimating the amount of the allocation base.
- 6) If a job is not completed at year end, then no manufacturing overhead cost would be applied to that job when a predetermined overhead rate is used.
- 7) Actual overhead costs are not assigned to jobs in a job costing system.
- 8) The amount of overhead applied to a particular job equals the actual amount of overhead caused by the job.
- 9) If the overhead rate is computed annually based on the actual costs and activity for the year, the manufacturing overhead assigned to any particular job can be computed as soon as the job is completed.
- 10) Job cost sheets contain entries for actual direct material, actual direct labor, and actual manufacturing overhead cost incurred in completing a job.
- 11) In a job-order cost system, indirect labor is assigned to a job using information from the employee time ticket.
- 12) If the allocation base in the predetermined overhead rate does not drive overhead costs, it will nevertheless provide reasonably accurate unit product costs because of the averaging process.
- 13) A job cost sheet is used to record how much a customer pays for the job once the job is completed.
- 14) In a job-order costing system, costs are traced to individual units of product. The sum total of such traced costs is called the unit product cost.

- 15) The fact that one department may be labor intensive while another department is machine intensive explains in part why multiple predetermined overhead rates are often used in larger companies.
- 16) A company will improve job cost accuracy by using multiple overhead rates even if it cannot identify more than one overhead cost driver.
- 17) The appeal of using multiple departmental overhead rates is that they presumably provide a more accurate accounting of the costs caused by jobs.
- 18) The costs attached to products that have not been sold are included in ending inventory on the balance sheet.
- 19) In absorption costing, nonmanufacturing costs are assigned to units of product.
- 20) An employee time ticket is an hour-by-hour summary of the employee's activities throughout the day.
- 21) A bill of materials is a document that lists the type and quantity of each type of direct material needed to complete a unit of product.
- 22) Most countries require some form of absorption costing for external reports.
- 23) In a job-order costing system that is based on machine-hours, which of the following formulas is correct?
- A) $\text{Predetermined overhead rate} = \text{Actual manufacturing overhead} \div \text{Actual machine-hours}$
- B) $\text{Predetermined overhead rate} = \text{Actual manufacturing overhead} \div \text{Estimated machine-hours}$
- C) $\text{Predetermined overhead rate} = \text{Estimated manufacturing overhead} \div \text{Estimated machine-hours}$
- D) $\text{Predetermined overhead rate} = \text{Estimated manufacturing overhead} \div \text{Actual machine-hours}$
- 24) Which of the following is the correct formula to compute the predetermined overhead rate?
- A) $\text{Predetermined overhead rate} = \text{Estimated total units in the allocation base} \div \text{Estimated total manufacturing overhead costs}$
- B) $\text{Predetermined overhead rate} = \text{Estimated total manufacturing overhead costs} \div \text{Estimated total units in the allocation base}$
- C) $\text{Predetermined overhead rate} = \text{Actual total manufacturing overhead costs} \div \text{Estimated total units in the allocation base}$
- D) $\text{Predetermined overhead rate} = \text{Estimated total manufacturing overhead costs} \div \text{Actual total units in the allocation base}$.

25) Assigning manufacturing overhead to a specific job is complicated by all of the below except:

- A) Manufacturing overhead is an indirect cost that is either impossible or difficult to trace to a particular job.
- B) Manufacturing overhead is incurred only to support some jobs.
- C) Manufacturing overhead consists of both variable and fixed costs.
- D) The average cost of actual fixed manufacturing overhead expenses will vary depending on how many units are produced in a period.

26) Which of the following statements about using a plantwide overhead rate based on direct labor is correct?

- A) Using a plantwide overhead rate based on direct labor-hours will ensure that direct labor costs are correctly traced to jobs.
- B) Using a plantwide overhead rate based on direct labor costs will ensure that direct labor costs will be correctly traced to jobs.
- C) It is often overly simplistic and incorrect to assume that direct labor-hours is a company's only manufacturing overhead cost driver.
- D) The labor theory of value ensures that using a plantwide overhead rate based on direct labor will do a reasonably good job of assigning overhead costs to jobs.

27) Which of the following would usually be found on a job cost sheet under a normal cost system?

	Actual direct material cost	Actual manufacturing overhead cost
A)	Yes	Yes
B)	Yes	No
C)	No	Yes
D)	No	No

- A) Choice A
- B) Choice B
- C) Choice C
- D) Choice D

28) Which of the following statements is not correct concerning multiple overhead rate systems?

- A) A multiple overhead rate system is more complex than a system based on a single plantwide overhead rate.
- B) A multiple overhead rate system is usually more accurate than a system based on a single plantwide overhead rate.
- C) A company may choose to create a separate overhead rate for each of its production departments.
- D) In departments that are relatively labor-intensive, their overhead costs should be applied to jobs based on machine-hours rather than on direct labor-hours.

29) Johansen Corporation uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. The Corporation has provided the following estimated costs for the next year:

Direct materials	\$ 6,000
Direct labor	\$ 20,000
Rent on factory building	\$ 15,000
Sales salaries	\$ 25,000
Depreciation on factory equipment	\$ 8,000
Indirect labor	\$ 12,000
Production supervisor's salary	\$ 15,000

Jameson estimates that 20,000 direct labor-hours will be worked during the year. The predetermined overhead rate per hour will be:

- A) \$2.50 per direct labor-hour
- B) \$2.79 per direct labor-hour
- C) \$3.00 per direct labor-hour
- D) \$4.00 per direct labor-hour

30) The Silver Corporation uses a predetermined overhead rate to apply manufacturing overhead to jobs. The predetermined overhead rate is based on labor cost in Dept. A and on machine-hours in Dept. B. At the beginning of the year, the Corporation made the following estimates:

	Dept. A	Dept. B
Direct labor cost	\$ 60,000	\$ 40,000
Manufacturing overhead	\$ 90,000	\$ 45,000
Direct labor-hours	6,000	9,000
Machine-hours	2,000	15,000

What predetermined overhead rates would be used in Dept. A and Dept. B, respectively?

- A) 67% and \$3.00
- B) 150% and \$5.00
- C) 150% and \$3.00
- D) 67% and \$5.00

31) Purves Corporation is using a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of \$121,000 and 10,000 direct labor-hours for the period. The company incurred actual total fixed manufacturing overhead of \$113,000 and 10,900 total direct labor-hours during the period. The predetermined overhead rate is closest to:

- A) \$10.37
- B) \$12.10
- C) \$11.10
- D) \$11.30

32) Reamer Corporation uses a predetermined overhead rate based on machine-hours to apply manufacturing overhead to jobs. The Corporation has provided the following estimated costs for next year:

Direct materials	\$ 1,000
Direct labor	\$ 3,000
Sales commissions	\$ 4,000
Salary of production supervisor	\$ 2,000
Indirect materials	\$ 400
Advertising expense	\$ 800
Rent on factory equipment	\$ 1,000

Reamer estimates that 500 direct labor-hours and 1,000 machine-hours will be worked during the year. The predetermined overhead rate per hour will be:

- A) \$6.80 per machine-hour
- B) \$6.00 per machine-hour
- C) \$3.00 per machine-hour
- D) \$3.40 per machine-hour

33) Baj Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Estimated total fixed manufacturing overhead from the beginning of the year	\$ 534,000
Estimated activity level from the beginning of the year	30,000machine-hours
Actual total fixed manufacturing overhead	\$ 487,000
Actual activity level	27,400machine-hours

The predetermined overhead rate per machine-hour would be closest to:

- A) \$17.80
- B) \$19.49
- C) \$16.23
- D) \$17.77

34) Giannitti Corporation bases its predetermined overhead rate on the estimated machine-hours for the upcoming year. Data for the upcoming year appear below:

Estimated machine-hours	36,000
Estimated variable manufacturing overhead	\$ 3.01 per machine-hour
Estimated total fixed manufacturing overhead	\$ 1,058,040

The predetermined overhead rate for the recently completed year was closest to:

- A) \$29.39 per machine-hour
- B) \$32.40 per machine-hour
- C) \$32.81 per machine-hour
- D) \$3.01 per machine-hour

35) Gilchrist Corporation bases its predetermined overhead rate on the estimated machine-hours for the upcoming year. At the beginning of the most recently completed year, the Corporation estimated the machine-hours for the upcoming year at 79,000 machine-hours. The estimated variable manufacturing overhead was \$7.38 per machine-hour and the estimated total fixed manufacturing overhead was \$2,347,090. The predetermined overhead rate for the recently completed year was closest to:

- A) \$37.09 per machine-hour
- B) \$36.07 per machine-hour
- C) \$7.38 per machine-hour
- D) \$29.71 per machine-hour

36) Dearden Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$144,000, variable manufacturing overhead of \$2.00 per machine-hour, and 60,000 machine-hours. The predetermined overhead rate is closest to:

- A) \$2.40 per machine-hour
- B) \$6.40 per machine-hour
- C) \$4.40 per machine-hour
- D) \$2.00 per machine-hour

37) Longobardi Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. At the beginning of the most recently completed year, the Corporation estimated the labor-hours for the upcoming year at 46,000 labor-hours. The estimated variable manufacturing overhead was \$6.25 per labor-hour and the estimated total fixed manufacturing overhead was \$1,026,260. The actual labor-hours for the year turned out to be 41,200 labor-hours. The predetermined overhead rate for the recently completed year was closest to:

- A) \$28.56 per labor-hour
- B) \$22.31 per labor-hour
- C) \$6.25 per labor-hour
- D) \$31.16 per labor-hour

38) Valvano Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$440,000, variable manufacturing overhead of \$2.20 per machine-hour, and 50,000 machine-hours. The estimated total manufacturing overhead is closest to:

- A) \$440,000
- B) \$110,000
- C) \$440,002
- D) \$550,000

39) Brothern Corporation bases its predetermined overhead rate on the estimated machine-hours for the upcoming year. Data for the most recently completed year appear below:

Estimates made at the beginning of the year:

Estimated machine-hours	39,000
Estimated variable manufacturing overhead	\$ 6.76 per machine-hour
Estimated total fixed manufacturing overhead	\$ 794,430
Actual machine-hours for the year	42,700

The predetermined overhead rate for the recently completed year was closest to:

- A) \$25.37 per machine-hour
- B) \$27.13 per machine-hour
- C) \$6.76 per machine-hour
- D) \$20.37 per machine-hour

40) Steele Corporation uses a predetermined overhead rate based on machine-hours to apply manufacturing overhead to jobs. Steele Corporation has provided the following estimated costs for next year:

Direct materials	\$ 20,000
Direct labor	\$ 60,000
Sales commissions	\$ 80,000
Salary of production supervisor	\$ 40,000
Indirect materials	\$ 8,000
Advertising expense	\$ 16,000
Rent on factory equipment	\$ 20,000

Steele estimates that 10,000 direct labor-hours and 16,000 machine-hours will be worked during the year. The predetermined overhead rate per hour will be:

- A) \$4.25
- B) \$8.00
- C) \$9.00
- D) \$10.25

41) Helland Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	30,000
Total fixed manufacturing overhead cost	\$ 189,000
Variable manufacturing overhead per direct labor-hour	\$ 2.50

The predetermined overhead rate is closest to:

- A) \$2.50 per direct labor-hour
- B) \$11.30 per direct labor-hour
- C) \$6.30 per direct labor-hour
- D) \$8.80 per direct labor-hour

42) Laflame Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	70,000
Total fixed manufacturing overhead cost	\$ 357,000
Variable manufacturing overhead per machine-hour	\$ 3.90

The estimated total manufacturing overhead is closest to:

- A) \$273,000
- B) \$630,000
- C) \$357,004
- D) \$357,000

43) Almaraz Corporation has two manufacturing departments—Forming and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Finishing	Total
Estimated total machine-hours (MHs)	7,000	3,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 40,600	\$ 8,100	\$ 48,700
Estimated variable manufacturing overhead cost per MH	\$ 1.30	\$ 2.80	

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. That predetermined manufacturing overhead rate is closest to:

- A) \$6.62
- B) \$4.87
- C) \$4.10
- D) \$7.10

44) Bernson Corporation is using a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of \$492,000 and 30,000 machine-hours for the period. The company incurred actual total fixed manufacturing overhead of \$517,000 and 28,300 total machine-hours during the period. The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:

- A) \$464,120
- B) \$492,000
- C) \$487,703
- D) \$25,000

45) Beat Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	40,000
Total fixed manufacturing overhead cost	\$ 344,000
Variable manufacturing overhead per machine-hour	\$ 3.90

Recently, Job M759 was completed. It required 60 machine-hours. The amount of overhead applied to Job M759 is closest to:

- A) \$750
- B) \$516
- C) \$984
- D) \$234

46) Mundorf Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	9,000	1,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 52,200	\$ 2,400	\$ 54,600
Estimated variable manufacturing overhead cost per MH	\$ 2.00	\$ 2.10	

During the most recent month, the company started and completed two jobs—Job B and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job H
Forming machine-hours	6,100	2,900
Assembly machine-hours	400	600

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job B is closest to:

- A) \$48,555
- B) \$35,490
- C) \$2,988
- D) \$45,567

47) Parido Corporation has two manufacturing departments—Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	8,000	2,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 44,000	\$ 4,200	\$ 48,200
Estimated variable manufacturing overhead cost per MH	\$ 1.90	\$ 3.00	

During the most recent month, the company started and completed two jobs—Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job H
Casting machine-hours	5,400	2,600
Assembly machine-hours	800	1,200

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job H is closest to:

- A) \$8,328
- B) \$26,372
- C) \$18,316
- D) \$18,044

48) Juanita Corporation uses a job-order costing system and applies overhead on the basis of direct labor cost. At the end of October, Juanita had one job still in process. The job cost sheet for this job contained the following information:

Direct materials	\$ 480
Direct labor	\$ 150
Manufacturing overhead applied	\$ 600

An additional \$100 of labor was needed in November to complete this job. For this job, how much should Juanita have transferred to finished goods inventory in November when it was completed?

- A) \$1,330
- B) \$500
- C) \$1,230
- D) \$1,730

49) Carradine Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$105,000, variable manufacturing overhead of \$3.00 per machine-hour, and 70,000 machine-hours. The company recently completed Job P233 which required 60 machine-hours. The amount of overhead applied to Job P233 is closest to:

- A) \$90
- B) \$270
- C) \$450
- D) \$180

50) Fusaro Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Estimated total fixed manufacturing overhead from the beginning of the year	\$ 684,000
Estimated activity level from the beginning of the year	40,000 machine-hours
Actual total fixed manufacturing overhead	\$ 616,000
Actual activity level	37,700 machine-hours

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:

- A) \$644,670
- B) \$684,000
- C) \$68,000
- D) \$580,580

51) Koelsch Corporation has two manufacturing departments—Molding and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Molding	Customizing	Total
Estimated total machine-hours (MHs)	1,000	9,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 4,000	\$ 25,200	\$ 29,200
Estimated variable manufacturing overhead cost per MH	\$ 2.00	\$ 3.00	

During the most recent month, the company started and completed two jobs—Job F and Job K. There were no beginning inventories. Data concerning those two jobs follow:

	Job F	Job K
Direct materials	\$ 12,300	\$ 8,400
Direct labor cost	\$ 18,200	\$ 6,800
Molding machine-hours	700	300
Customizing machine-hours	3,600	5,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job K is closest to:

- A) \$72,561
- B) \$79,817
- C) \$24,187
- D) \$48,374

52) Thach Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$665,000, variable manufacturing overhead of \$3.00 per machine-hour, and 70,000 machine-hours. Recently, Job T321 was completed with the following characteristics:

Number of units in the job	30
Total machine-hours	90
Direct materials	\$ 630
Direct labor cost	\$ 2,880

The unit product cost for Job T321 is closest to:

- A) \$117.00
- B) \$58.50
- C) \$154.50
- D) \$51.50

53) Tancredi Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Molding	Customizing	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 22,000	\$ 11,500	\$ 33,500
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 3.00	

During the most recent month, the company started and completed two jobs—Job E and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job E	Job J
Direct materials	\$ 12,800	\$ 7,000
Direct labor cost	\$ 17,600	\$ 7,700
Machining machine-hours	3,400	1,600
Customizing machine-hours	2,000	3,000

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. If both jobs are sold during the month, the company's cost of goods sold for the month would be closest to:

- A) \$61,450
- B) \$41,150
- C) \$110,808
- D) \$102,600

54) Session Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	70,000
Total fixed manufacturing overhead cost	\$ 511,000
Variable manufacturing overhead per direct labor-hour	\$ 2.10

Recently, Job K913 was completed with the following characteristics:

Total direct labor-hours	150
Direct materials	\$ 705
Direct labor cost	\$ 4,650

The total job cost for Job K913 is closest to:

- A) \$6,060
- B) \$2,115
- C) \$6,765
- D) \$5,355

55) Pebbles Corporation has two manufacturing departments—Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Finishing	Total
Estimated total machine-hours (MHs)	2,000	3,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 9,800	\$ 6,300	\$ 16,100
Estimated variable manufacturing overhead cost per MH	\$ 2.00	\$ 2.40	

During the most recent month, the company started and completed two jobs—Job A and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job L
Direct materials	\$ 15,400	\$ 9,600
Direct labor cost	\$ 24,900	\$ 6,200
Casting machine-hours	1,400	600
Finishing machine-hours	1,200	1,800

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job L is closest to:

- A) \$9,600
- B) \$6,200
- C) \$28,904
- D) \$13,104

56) Stockmaster Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 27,000	\$ 10,500	\$ 37,500
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.80	

During the most recent month, the company started and completed two jobs—Job C and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job H
Direct materials	\$ 11,200	\$ 7,500
Direct labor cost	\$ 21,900	\$ 7,800
Forming machine-hours	3,400	1,600
Assembly machine-hours	2,000	3,000

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of 40% on manufacturing cost to establish selling prices. The calculated selling price for Job C is closest to:

- A) \$96,989
- B) \$88,172
- C) \$25,192
- D) \$62,980

57) Atteberry Corporation has two manufacturing departments—Machining and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Finishing	Total
Estimated total machine-hours (MHs)	6,000	4,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 30,000	\$ 11,200	\$ 41,200
Estimated variable manufacturing overhead cost per MH	\$ 2.00	\$ 2.40	

During the most recent month, the company started and completed two jobs—Job E and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job E	Job L
Direct materials	\$ 13,400	\$ 9,100
Direct labor cost	\$ 24,500	\$ 7,000
Machining machine-hours	4,100	1,900
Finishing machine-hours	1,600	2,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job E is closest to:

- A) \$24,500
- B) \$35,796
- C) \$13,400
- D) \$73,696

58) Coates Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$249,000, variable manufacturing overhead of \$3.80 per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job X784 which was recently completed:

Job E's manufacturing cost:

Number of units in the job	50
Total machine-hours	250
Direct materials	\$ 470
Direct labor cost	\$ 5,500

If the company marks up its unit product costs by 30% then the selling price for a unit in Job X784 is closest to:

- A) \$253.87
- B) \$233.87
- C) \$53.97
- D) \$155.22

59) Sutter Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	10,000
Total fixed manufacturing overhead cost	\$ 35,000
Variable manufacturing overhead per machine-hour	\$ 2.20

Recently, Job T369 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	40
Direct materials	\$ 750
Direct labor cost	\$ 1,560

If the company marks up its unit product costs by 20% then the selling price for a unit in Job T369 is closest to:

- A) \$324.56
- B) \$304.56
- C) \$277.20
- D) \$50.76

60) Doakes Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	60,000
Total fixed manufacturing overhead cost	\$ 378,000
Variable manufacturing overhead per direct labor-hour	\$ 2.20

Recently, Job M843 was completed with the following characteristics:

Number of units in the job	60
Total direct labor-hours	120
Direct materials	\$ 630
Direct labor cost	\$ 2,400

The unit product cost for Job M843 is closest to:

- A) \$33.75
- B) \$67.50
- C) \$27.50
- D) \$50.50

61) Placker Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$155,000, variable manufacturing overhead of \$3.40 per machine-hour, and 50,000 machine-hours. Recently, Job A881 was completed with the following characteristics:

Total machine-hours	100
Direct materials	\$ 645
Direct labor cost	\$ 2,300

The total job cost for Job A881 is closest to:

- A) \$3,595
- B) \$2,945
- C) \$2,950
- D) \$1,295

62) Tomey Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Finishing
Machine-hours	18,000	14,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 99,000	\$ 70,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.70

During the current month the company started and finished Job T617. The following data were recorded for this job:

Job T617:	Forming	Finishing
Machine-hours	90	20
Direct labor-hours	30	60
Direct materials	\$ 940	\$ 350
Direct labor cost	\$ 960	\$ 1920

The total job cost for JobT617 is closest to:

- A) \$5,604
- B) \$2,584
- C) \$684
- D) \$3,020

63) Molash Corporation has two manufacturing departments—Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Assembly	Total
Estimated total machine-hours (MHs)	2000	3000	5000
Estimated total fixed manufacturing overhead cost	\$ 9,400	\$ 8,100	\$ 17,500
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.40	

During the most recent month, the company started and completed two jobs—Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job L
Direct materials	\$ 14,400	\$ 7,100
Direct labor cost	\$ 23,500	\$ 6,700
Machining machine-hours	1,400	600
Assembly machine-hours	1,200	1,800

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job L is closest to:

- A) \$40,320
- B) \$41,933
- C) \$13,440
- D) \$26,880

64) Columbo Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Finishing
Machine-hours	17,000	10,000
Direct labor-hours	1,000	9,000
Total fixed manufacturing overhead cost	\$ 110,500	\$ 78,300
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job A948. The following data were recorded for this job:

Job A948:	Forming	Finishing
Machine-hours	70	30
Direct labor-hours	10	50
Direct materials	\$ 650	\$ 330
Direct labor cost	\$ 380	\$ 1,900

If the company marks up its manufacturing costs by 40% then the selling price for Job A948 would be closest to:

- A) \$6,197.80
- B) \$1,770.80
- C) \$4,427.00
- D) \$6,818.00

65) Lotz Corporation has two manufacturing departments—Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Finishing	Total
Estimated total machine-hours (MHs)	2,000	8,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 10,200	\$ 19,200	\$ 29,400
Estimated variable manufacturing overhead cost per MH	\$ 1.20	\$ 2.20	

During the most recent month, the company started and completed two jobs—Job F and Job K. There were no beginning inventories. Data concerning those two jobs follow:

	Job F	Job K
Direct materials	\$ 14,400	\$ 7,100
Direct labor cost	\$ 22,500	\$ 6,600
Casting machine-hours	1,400	600
Finishing machine-hours	3,200	4,800

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job F is closest to:

- A) \$30,220
- B) \$90,660
- C) \$60,440
- D) \$96,100

66) Ashe Corporation has two manufacturing departments — Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	1,000	4,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 4,700	\$ 9,200	\$ 13,900
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.60	

During the most recent month, the company started and completed two jobs — Job B and Job K. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job K
Machining machine-hours	700	300
Customizing machine-hours	1,600	2,400

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job K is closest to:

- A) \$11,760
- B) \$1,740
- C) \$13,716
- D) \$13,500

67) Boward Corporation has two production departments, Milling and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Assembly
Machine-hours	18,000	12,000
Direct labor-hours	2,000	7,000
Total fixed manufacturing overhead cost	\$ 120,600	\$ 76,300
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

During the current month the company started and finished Job T818. The following data were recorded for this job:

Job T818:	Milling	Assembly
Machine-hours	50	30
Direct labor-hours	10	40

The total amount of overhead applied in both departments to Job T818 is closest to:

- A) \$1,651
- B) \$608
- C) \$435
- D) \$1,043

68) Malakan Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	18,000	11,000
Direct labor-hours	2,000	9,000
Total fixed manufacturing overhead cost	\$ 102,600	\$ 96,300
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

During the current month the company started and finished Job K368. The following data were recorded for this job:

Job K368:	Machining	Finishing
Machine-hours	80	30
Direct labor-hours	20	40

The amount of overhead applied in the Machining Department to Job K368 is closest to:

- A) \$856.00
- B) \$168.00
- C) \$624.00
- D) \$140,400.00

69) Mahon Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Customizing
Machine-hours	18,000	14,000
Direct labor-hours	2,000	7,000
Total fixed manufacturing overhead cost	\$ 124,200	\$ 68,600
Variable manufacturing overhead per machine-hour	\$ 1.90	
Variable manufacturing overhead per direct labor-hour		\$ 3.80

During the current month the company started and finished Job T138. The following data were recorded for this job:

Job T138:	Casting	Customizing
Machine-hours	70	30
Direct labor-hours	10	60

The amount of overhead applied in the Customizing Department to Job T138 is closest to:

- A) \$588.00
- B) \$95,200.00
- C) \$816.00
- D) \$228.00

70) Marioni Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	7,000	3,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 37,100	\$ 9,000	\$ 46,100
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job B and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job H
Forming machine-hours	4,800	2,200
Assembly machine-hours	1,200	1,800

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job B is closest to:

- A) \$6,720
- B) \$33,600
- C) \$40,320
- D) \$39,480

71) Bassett Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	16,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 118,400	\$ 87,200
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

The predetermined overhead rate for the Milling Department is closest to:

- A) \$19.00 per machine-hour
- B) \$2.10 per machine-hour
- C) \$9.50 per machine-hour
- D) \$7.40 per machine-hour

72) Fatzinger Corporation has two production departments, Milling and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Assembly
Machine-hours	20,000	14,000
Direct labor-hours	2,000	7,000
Total fixed manufacturing overhead cost	\$ 137,000	\$ 57,400
Variable manufacturing overhead per machine-hour	\$ 2.30	
Variable manufacturing overhead per direct labor-hour		\$ 3.40

The predetermined overhead rate for the Assembly Department is closest to:

- A) \$8.20 per direct labor-hour
- B) \$3.40 per direct labor-hour
- C) \$4.06 per direct labor-hour
- D) \$11.60 per direct labor-hour

73) Swango Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Customizing
Machine-hours	19,000	11,000
Direct labor-hours	1,000	8,000
Total fixed manufacturing overhead cost	\$ 138,700	\$ 86,400
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

The estimated total manufacturing overhead for the Customizing Department is closest to:

- A) \$24,000
- B) \$110,400
- C) \$86,400
- D) \$60,379

74) Tarrant Corporation has two manufacturing departments—Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Finishing	Total
Estimated total machine-hours (MHs)	1,000	4,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 5,700	\$ 11,200	\$ 16,900
Estimated variable manufacturing overhead cost per MH	\$ 1.30	\$ 2.90	

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Casting Department is closest to:

- A) \$5.70
- B) \$1.30
- C) \$5.96
- D) \$7.00

75) Prayer Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	19,000	13,000
Direct labor-hours	1,000	8,000
Total fixed manufacturing overhead cost	\$ 110,200	\$ 68,800
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 3.60

The estimated total manufacturing overhead for the Machining Department is closest to:

- A) \$148,200
- B) \$110,200
- C) \$38,000
- D) \$299,725

76) Camm Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	3,000	2,000	5000
Estimated total fixed manufacturing overhead cost	\$ 12,600	\$ 4,600	\$ 17,200
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.50	

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Assembly Department is closest to:

- A) \$2.50
- B) \$2.30
- C) \$4.80
- D) \$5.46

77) Huang Aerospace Corporation manufactures aviation control panels in two departments, Fabrication and Assembly. In the Fabrication department, Huang uses a predetermined overhead rate of \$30 per machine-hour. In the Assembly department, Huang uses a predetermined overhead rate of \$12 per direct labor-hour. During the current year, Job #X2984 incurred the following number of hours in each department:

	Fabrication	Assembly
Machine-hours	40	12
Direct labor-hours	3	25

What is the total amount of manufacturing overhead that Huang should have applied to Job #X2984 during the current year?

- A) \$1,200
- B) \$1,500
- C) \$1,560
- D) \$1,734

78) Sargent Corporation applies overhead cost to jobs on the basis of 80% of direct labor cost. If Job 210 shows \$10,000 of manufacturing overhead cost applied, how much was the direct labor cost on the job?

- A) \$12,500
- B) \$11,000
- C) \$8,000
- D) \$10,000

79) Kreuzer Corporation is using a predetermined overhead rate of \$22.30 per machine-hour that was based on estimated total fixed manufacturing overhead of \$446,000 and 20,000 machine-hours for the period. The company incurred actual total fixed manufacturing overhead of \$409,000 and 18,200 total machine-hours during the period. The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:

- A) \$446,000
- B) \$37,000
- C) \$372,190
- D) \$405,860

80) Kavin Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Predetermined overhead rate	\$ 23.60 per machine-hour
Estimated total fixed manufacturing overhead from the beginning of the year	\$ 708,000
Estimated activity level from the beginning of the year	30,000 machine-hours
Actual total fixed manufacturing overhead	\$ 752,000
Actual activity level	28,100 machine-hours

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:

- A) \$663,160
- B) \$708,000
- C) \$44,000
- D) \$704,373

81) Job 910 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$ 3,193
Direct labor-hours	21 labor-hours
Direct labor wage rate	\$ 12 per labor-hour
Machine-hours	166 machine-hours

The Corporation applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$15 per machine-hour. The total cost that would be recorded on the job cost sheet for Job 910 would be:

- A) \$3,220
- B) \$3,760
- C) \$5,935
- D) \$3,445

82) Grib Corporation uses a predetermined overhead rate based on direct labor cost to apply manufacturing overhead to jobs. The predetermined overhead rates for the year are 200% of direct labor cost for Department A and 50% of direct labor cost for Department B. Job 436, started and completed during the year, was charged with the following costs:

	Dept. A	Dept. B
Direct materials	\$ 50,000	\$ 10,000
Direct labor		? \$ 60,000
Manufacturing overhead	\$ 80,000	?

The total manufacturing cost assigned to Job 436 was:

- A) \$360,000
- B) \$390,000
- C) \$270,000
- D) \$480,000

83) The following data have been recorded for recently completed Job 450 on its job cost sheet. Direct materials cost was \$3,044. A total of 46 direct labor-hours and 104 machine-hours were worked on the job. The direct labor wage rate is \$15 per labor-hour. The Corporation applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$13 per machine-hour. The total cost for the job on its job cost sheet would be:

- A) \$4,332
- B) \$3,734
- C) \$3,072
- D) \$5,086

84) Dejarnette Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 416,000
Variable manufacturing overhead per machine-hour	\$ 3.10

The estimated total manufacturing overhead is closest to:

- A) \$416,003
- B) \$248,000
- C) \$664,000
- D) \$416,000

85) Dejarnette Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 416,000
Variable manufacturing overhead per machine-hour	\$ 3.10

The predetermined overhead rate is closest to:

- A) \$8.30 per machine-hour
- B) \$11.40 per machine-hour
- C) \$5.20 per machine-hour
- D) \$3.10 per machine-hour

86) Odonnel Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$36,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 10,000 direct labor-hours.

The estimated total manufacturing overhead is closest to:

- A) \$64,000
- B) \$36,000
- C) \$28,000
- D) \$36,003

87) Odonnel Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$36,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 10,000 direct labor-hours.

The predetermined overhead rate is closest to:

- A) \$2.80 per direct labor-hour
- B) \$6.40 per direct labor-hour
- C) \$3.60 per direct labor-hour
- D) \$9.20 per direct labor-hour

88) Morataya Corporation has two manufacturing departments—Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Assembly	Total
Estimated total machine-hours (MHs)	7,000	3,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 39,200	\$ 6,600	\$ 45,800
Estimated variable manufacturing overhead cost per MH	\$ 1.90	\$ 2.10	

During the most recent month, the company started and completed two jobs—Job B and Job G. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job G
Direct materials	\$ 14,800	\$ 8,300
Direct labor cost	\$ 22,000	\$ 8,900
Machining machine-hours	4,800	2,200
Assembly machine-hours	1,200	1,800

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. That predetermined manufacturing overhead rate is closest to:

- A) \$4.00
- B) \$7.50
- C) \$4.58
- D) \$6.54

89) Morataya Corporation has two manufacturing departments—Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Assembly	Total
Estimated total machine-hours (MHs)	7,000	3,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 39,200	\$ 6,600	\$ 45,800
Estimated variable manufacturing overhead cost per MH	\$ 1.90	\$ 2.10	

During the most recent month, the company started and completed two jobs—Job B and Job G. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job G
Direct materials	\$ 14,800	\$ 8,300
Direct labor cost	\$ 22,000	\$ 8,900
Machining machine-hours	4,800	2,200
Assembly machine-hours	1,200	1,800

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job B is closest to:

- A) \$31,392
- B) \$27,480
- C) \$39,240
- D) \$7,848

90) Morataya Corporation has two manufacturing departments—Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Assembly	Total
Estimated total machine-hours (MHs)	7,000	3,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 39,200	\$ 6,600	\$ 45,800
Estimated variable manufacturing overhead cost per MH	\$ 1.90	\$ 2.10	

During the most recent month, the company started and completed two jobs—Job B and Job G. There were no beginning inventories. Data concerning those two jobs follow:

	Job B	Job G
Direct materials	\$ 14,800	\$ 8,300
Direct labor cost	\$ 22,000	\$ 8,900
Machining machine-hours	4,800	2,200
Assembly machine-hours	1,200	1,800

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job G is closest to:

- A) \$14,388
- B) \$26,160
- C) \$11,772
- D) \$18,320

91) Housholder Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Estimated total fixed manufacturing overhead from the beginning of the year	\$ 310,000
Estimated activity level from the beginning of the year	20,000 machine-hours
Actual total fixed manufacturing overhead	\$ 338,000
Actual activity level	18,300 machine-hours

The predetermined overhead rate is closest to:

- A) \$18.47
- B) \$16.94
- C) \$16.90
- D) \$15.50

92) Housholder Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Estimated total fixed manufacturing overhead from the beginning of the year	\$ 310,000
Estimated activity level from the beginning of the year	20,000 machine-hours
Actual total fixed manufacturing overhead	\$ 338,000
Actual activity level	18,300 machine-hours

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:

- A) \$28,000
- B) \$309,270
- C) \$310,000
- D) \$283,650

93) Gerstein Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$90,000, variable manufacturing overhead of \$3.70 per direct labor-hour, and 50,000 direct labor-hours. The company recently completed Job M800 which required 150 direct labor-hours.

The estimated total manufacturing overhead is closest to:

- A) \$90,000
- B) \$275,000
- C) \$185,000
- D) \$90,004

94) Gerstein Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$90,000, variable manufacturing overhead of \$3.70 per direct labor-hour, and 50,000 direct labor-hours. The company recently completed Job M800 which required 150 direct labor-hours.

The predetermined overhead rate is closest to:

- A) \$1.80 per direct labor-hour
- B) \$5.50 per direct labor-hour
- C) \$9.20 per direct labor-hour
- D) \$3.70 per direct labor-hour

95) Gerstein Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$90,000, variable manufacturing overhead of \$3.70 per direct labor-hour, and 50,000 direct labor-hours. The company recently completed Job M800 which required 150 direct labor-hours.

The amount of overhead applied to Job M800 is closest to:

- A) \$270
- B) \$1,380
- C) \$825
- D) \$555

96) Krier Corporation uses a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of \$738,000 and 30,000 direct labor-hours for the period. The company incurred actual total fixed manufacturing overhead of \$792,000 and 31,500 total direct labor-hours during the period.

The predetermined overhead rate is closest to:

- A) \$26.40
- B) \$25.14
- C) \$23.43
- D) \$24.60

97) Krier Corporation uses a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of \$738,000 and 30,000 direct labor-hours for the period. The company incurred actual total fixed manufacturing overhead of \$792,000 and 31,500 total direct labor-hours during the period.

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:

- A) \$831,600
- B) \$54,000
- C) \$774,900
- D) \$738,000

98) Harootunian Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 312,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T629 was completed with the following characteristics:

Number of units in the job	50
Total machine-hours	200

The amount of overhead applied to Job T629 is closest to:

- A) \$1,620
- B) \$780
- C) \$1,200
- D) \$420

99) Harootunian Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 312,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T629 was completed with the following characteristics:

Number of units in the job	50
Total machine-hours	200

The predetermined overhead rate is closest to:

- A) \$8.10 per machine-hour
- B) \$2.10 per machine-hour
- C) \$3.90 per machine-hour
- D) \$6.00 per machine-hour

100) Harootunian Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 312,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T629 was completed with the following characteristics:

Number of units in the job	50
Total machine-hours	200

The amount of overhead applied to Job T629 is closest to:

- A) \$1,620
- B) \$780
- C) \$1,200
- D) \$420

101) Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	40,000
Total fixed manufacturing overhead cost	\$ 96,000
Variable manufacturing overhead per direct labor-hour	\$ 3.00

Recently, Job P951 was completed with the following characteristics:

Number of units in the job	20
Total direct labor-hours	100
Direct materials	\$ 755
Direct labor cost	\$ 4,000

The estimated total manufacturing overhead is closest to:

- A) \$120,000
- B) \$96,003
- C) \$96,000
- D) \$216,000

102) Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	40,000
Total fixed manufacturing overhead cost	\$ 96,000
Variable manufacturing overhead per direct labor-hour	\$ 3.00

Recently, Job P951 was completed with the following characteristics:

Number of units in the job	20
Total direct labor-hours	100
Direct materials	\$ 755
Direct labor cost	\$ 4,000

The predetermined overhead rate is closest to:

- A) \$2.40 per direct labor-hour
- B) \$3.00 per direct labor-hour
- C) \$8.40 per direct labor-hour
- D) \$5.40 per direct labor-hour

103) Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	40,000
Total fixed manufacturing overhead cost	\$ 96,000
Variable manufacturing overhead per direct labor-hour	\$ 3.00

Recently, Job P951 was completed with the following characteristics:

Number of units in the job	20
Total direct labor-hours	100
Direct materials	\$ 755
Direct labor cost	\$ 4,000

The amount of overhead applied to Job P951 is closest to:

- A) \$840
- B) \$300
- C) \$540
- D) \$240

104) Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	40,000
Total fixed manufacturing overhead cost	\$ 96,000
Variable manufacturing overhead per direct labor-hour	\$ 3.00

Recently, Job P951 was completed with the following characteristics:

Number of units in the job	20
Total direct labor-hours	100
Direct materials	\$ 755
Direct labor cost	\$ 4,000

The total job cost for Job P951 is closest to:

- A) \$4,540
- B) \$4,755
- C) \$1,295
- D) \$5,295

105) Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	40,000
Total fixed manufacturing overhead cost	\$ 96,000
Variable manufacturing overhead per direct labor-hour	\$ 3.00

Recently, Job P951 was completed with the following characteristics:

Number of units in the job	20
Total direct labor-hours	100
Direct materials	\$ 755
Direct labor cost	\$ 4,000

The unit product cost for Job P951 is closest to:

- A) \$237.75
- B) \$264.75
- C) \$64.75
- D) \$52.95

106) Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$160,000, variable manufacturing overhead of \$3.40 per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:

Total direct labor-hours	250
Direct materials	\$ 715
Direct labor cost	\$ 9,000

The estimated total manufacturing overhead is closest to:

- A) \$272,000
- B) \$160,000
- C) \$432,000
- D) \$160,003

107) Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$160,000, variable manufacturing overhead of \$3.40 per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:

Total direct labor-hours	250
Direct materials	\$ 715
Direct labor cost	\$ 9,000

The predetermined overhead rate is closest to:

- A) \$8.80 per direct labor-hour
- B) \$2.00 per direct labor-hour
- C) \$3.40 per direct labor-hour
- D) \$5.40 per direct labor-hour

108) Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$160,000, variable manufacturing overhead of \$3.40 per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:

Total direct labor-hours	250
Direct materials	\$ 715
Direct labor cost	\$ 9,000

The amount of overhead applied to Job A578 is closest to:

- A) \$500
- B) \$1,350
- C) \$2,200
- D) \$850

109) Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$160,000, variable manufacturing overhead of \$3.40 per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:

Total direct labor-hours	250
Direct materials	\$ 715
Direct labor cost	\$ 9,000

The total job cost for Job A578 is closest to:

- A) \$11,065
- B) \$10,350
- C) \$2,065
- D) \$9,715

110) Spang Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	20,000
Total fixed manufacturing overhead cost	\$ 176,000
Variable manufacturing overhead per machine-hour	\$ 2.20

Recently, Job P505 was completed with the following characteristics:

Total machine-hours	200
Direct materials	\$ 540
Direct labor cost	\$ 7,200

The amount of overhead applied to Job P505 is closest to:

- A) \$2,200
- B) \$1,760
- C) \$2,640
- D) \$440

111) Spang Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	20,000
Total fixed manufacturing overhead cost	\$ 176,000
Variable manufacturing overhead per machine-hour	\$ 2.20

Recently, Job P505 was completed with the following characteristics:

Total machine-hours	200
Direct materials	\$ 540
Direct labor cost	\$ 7,200

The total job cost for Job P505 is closest to:

- A) \$9,400
- B) \$9,940
- C) \$7,740
- D) \$2,740

112) Opunui Corporation has two manufacturing departments—Molding and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Molding	Finishing	Total
Estimated total machine-hours (MHs)	4,000	1,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 19,600	\$ 2,400	\$ 22,000
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.10	

During the most recent month, the company started and completed two jobs—Job A and Job M. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job M
Direct materials	\$ 13,600	\$ 7,500
Direct labor cost	\$ 20,700	\$ 7,400
Molding machine-hours	2,700	1,300
Finishing machine-hours	400	600

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job M is closest to:

- A) \$10,830
- B) \$7,400
- C) \$25,730
- D) \$7,500

113) Opunui Corporation has two manufacturing departments—Molding and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Molding	Finishing	Total
Estimated total machine-hours (MHs)	4,000	1,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 19,600	\$ 2,400	\$ 22,000
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.10	

During the most recent month, the company started and completed two jobs—Job A and Job M. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job M
Direct materials	\$ 13,600	\$ 7,500
Direct labor cost	\$ 20,700	\$ 7,400
Molding machine-hours	2,700	1,300
Finishing machine-hours	400	600

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of 40% on manufacturing cost to establish selling prices. The calculated selling price for Job A is closest to:

- A) \$51,970
- B) \$72,758
- C) \$80,034
- D) \$20,788

114) Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$497,000, variable manufacturing overhead of \$2.40 per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

Number of units in the job	40
Total direct labor-hours	80
Direct materials	\$ 950
Direct labor cost	\$ 2,720

The estimated total manufacturing overhead is closest to:

- A) \$665,000
- B) \$497,002
- C) \$497,000
- D) \$168,000

115) Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$497,000, variable manufacturing overhead of \$2.40 per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

Number of units in the job	40
Total direct labor-hours	80
Direct materials	\$ 950
Direct labor cost	\$ 2,720

The predetermined overhead rate is closest to:

- A) \$11.90 per direct labor-hour
- B) \$7.10 per direct labor-hour
- C) \$9.50 per direct labor-hour
- D) \$2.40 per direct labor-hour

116) Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$497,000, variable manufacturing overhead of \$2.40 per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

Number of units in the job	40
Total direct labor-hours	80
Direct materials	\$ 950
Direct labor cost	\$ 2,720

The amount of overhead applied to Job T498 is closest to:

- A) \$568
- B) \$192
- C) \$760
- D) \$952

117) Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$497,000, variable manufacturing overhead of \$2.40 per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

Number of units in the job	40
Total direct labor-hours	80
Direct materials	\$ 950
Direct labor cost	\$ 2,720

The total job cost for Job T498 is closest to:

- A) \$4,430
- B) \$3,670
- C) \$1,710
- D) \$3,480

118) Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$497,000, variable manufacturing overhead of \$2.40 per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

Number of units in the job	40
Total direct labor-hours	80
Direct materials	\$ 950
Direct labor cost	\$ 2,720

The unit product cost for Job T498 is closest to:

- A) \$55.38
- B) \$42.75
- C) \$91.75
- D) \$110.75

119) Nielsen Corporation has two manufacturing departments—Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Assembly	Total
Estimated total machine-hours (MHs)	1,000	4,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 4,700	\$ 10,800	\$ 15,500
Estimated variable manufacturing overhead cost per MH	\$ 1.20	\$ 2.20	

During the most recent month, the company started and completed two jobs—Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

	Job F	Job M
Direct materials	\$ 13,000	\$ 7,400
Direct labor cost	\$ 20,400	\$ 8,800
Machining machine-hours	700	300
Assembly machine-hours	1,600	2,400

Assume that the company uses a *plantwide* predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job F is closest to:

- A) \$13,000
- B) \$20,400
- C) \$45,130
- D) \$11,730

120) Nielsen Corporation has two manufacturing departments—Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Assembly	Total
Estimated total machine-hours (MHs)	1,000	4,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 4,700	\$ 10,800	\$ 15,500
Estimated variable manufacturing overhead cost per MH	\$ 1.20	\$ 2.20	

During the most recent month, the company started and completed two jobs—Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

	Job F	Job M
Direct materials	\$ 13,000	\$ 7,400
Direct labor cost	\$ 20,400	\$ 8,800
Machining machine-hours	700	300
Assembly machine-hours	1,600	2,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of 40% on manufacturing cost to establish selling prices. The calculated selling price for Job M is closest to:

- A) \$46,154
- B) \$41,958
- C) \$29,970
- D) \$11,988

121) Decorte Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	10,000
Total fixed manufacturing overhead cost	\$33,000
Variable manufacturing overhead per direct labor-hour	\$ 2.50

Recently, Job K332 was completed with the following characteristics:

Number of units in the job	70
Total direct labor-hours	140
Direct materials	\$455
Direct labor cost	\$5,320

The amount of overhead applied to Job K332 is closest to:

- A) \$812
- B) \$350
- C) \$462
- D) \$1,162

122) Decorte Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	10,000
Total fixed manufacturing overhead cost	\$ 33,000
Variable manufacturing overhead per direct labor-hour	\$ 2.50

Recently, Job K332 was completed with the following characteristics:

Number of units in the job	70
Total direct labor-hours	140
Direct materials	\$ 455
Direct labor cost	\$ 5,320

The total job cost for Job K332 is closest to:

- A) \$5,775
- B) \$6,132
- C) \$6,587
- D) \$1,267

123) Decorte Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	10,000
Total fixed manufacturing overhead cost	\$ 33,000
Variable manufacturing overhead per direct labor-hour	\$ 2.50

Recently, Job K332 was completed with the following characteristics:

Number of units in the job	70
Total direct labor-hours	140
Direct materials	\$ 455
Direct labor cost	\$ 5,320

The unit product cost for Job K332 is closest to:

- A) \$94.10
- B) \$18.10
- C) \$82.50
- D) \$47.05

124) Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$162,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	50
Direct materials	\$ 920
Direct labor cost	\$ 1,400

The estimated total manufacturing overhead is closest to:

- A) \$330,000
- B) \$162,000
- C) \$168,000
- D) \$162,003

125) Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$162,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	50
Direct materials	\$ 920
Direct labor cost	\$ 1,400

The predetermined overhead rate is closest to:

- A) \$5.50 per direct labor-hour
- B) \$8.30 per direct labor-hour
- C) \$2.80 per direct labor-hour
- D) \$2.70 per direct labor-hour

126) Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$162,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	50
Direct materials	\$ 920
Direct labor cost	\$ 1,400

The amount of overhead applied to Job K818 is closest to:

- A) \$135
- B) \$140
- C) \$415
- D) \$275

127) Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$162,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	50
Direct materials	\$ 920
Direct labor cost	\$ 1,400

The total job cost for Job K818 is closest to:

- A) \$1,675
- B) \$2,595
- C) \$1,195
- D) \$2,320

128) Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$162,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	50
Direct materials	\$ 920
Direct labor cost	\$ 1,400

The unit product cost for Job K818 is closest to:

- A) \$51.90
- B) \$259.50
- C) \$232.00
- D) \$119.50

129) Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$162,000, variable manufacturing overhead of \$2.80 per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	50
Direct materials	\$ 920
Direct labor cost	\$ 1,400

If the company marks up its unit product costs by 40% then the selling price for a unit in Job K818 is closest to:

- A) \$363.30
- B) \$103.80
- C) \$383.30
- D) \$324.80

130) Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	30,000
Total fixed manufacturing overhead cost	\$ 252,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T687 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	30
Direct materials	\$ 675
Direct labor cost	\$ 1,050

The estimated total manufacturing overhead is closest to:

- A) \$315,000
- B) \$252,000
- C) \$252,002
- D) \$63,000

131) Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	30,000
Total fixed manufacturing overhead cost	\$ 252,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T687 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	30
Direct materials	\$ 675
Direct labor cost	\$ 1,050

The predetermined overhead rate is closest to:

- A) \$12.60 per machine-hour
- B) \$10.50 per machine-hour
- C) \$8.40 per machine-hour
- D) \$2.10 per machine-hour

132) Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	30,000
Total fixed manufacturing overhead cost	\$ 252,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T687 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	30
Direct materials	\$ 675
Direct labor cost	\$ 1,050

The amount of overhead applied to Job T687 is closest to:

- A) \$315
- B) \$252
- C) \$378
- D) \$63

133) Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	30,000
Total fixed manufacturing overhead cost	\$ 252,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T687 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	30
Direct materials	\$ 675
Direct labor cost	\$ 1,050

The total job cost for Job T687 is closest to:

- A) \$1,365
- B) \$1,725
- C) \$990
- D) \$2,040

134) Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	30,000
Total fixed manufacturing overhead cost	\$ 252,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T687 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	30
Direct materials	\$ 675
Direct labor cost	\$ 1,050

The unit product cost for Job T687 is closest to:

- A) \$99.00
- B) \$68.00
- C) \$172.50
- D) \$204.00

135) Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	30,000
Total fixed manufacturing overhead cost	\$ 252,000
Variable manufacturing overhead per machine-hour	\$ 2.10

Recently, Job T687 was completed with the following characteristics:

Number of units in the job	10
Total machine-hours	30
Direct materials	\$ 675
Direct labor cost	\$ 1,050

If the company marks up its unit product costs by 40% then the selling price for a unit in Job T687 is closest to:

- A) \$81.60
- B) \$305.60
- C) \$285.60
- D) \$241.50

136) Ronson Corporation has two manufacturing departments—Casting and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

		Customizing	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 27,500	\$ 10,500	\$ 38,000
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job C and Job G. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job G
Direct materials	\$ 10,600	\$ 6,800
Direct labor cost	\$ 23,700	\$ 87,900
Casting machine-hours	3,400	1,600
	2,000	3,000

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job C is closest to:

- A) \$32,130
- B) \$11,900
- C) \$20,230
- D) \$20,520

137) Ronson Corporation has two manufacturing departments—Casting and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

		Customizing	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 27,500	\$ 10,500	\$ 38,000
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job C and Job G. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job G
Direct materials	\$ 10,600	\$ 6,800
Direct labor cost	\$ 23,700	\$ 87,900
Casting machine-hours	3,400	1,600
	2,000	3,000

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job G is closest to:

- A) \$42,070
- B) \$27,370
- C) \$6,800
- D) \$7,900

138) Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 624,000
Variable manufacturing overhead per machine-hour	\$ 3.10

Recently, Job M598 was completed with the following characteristics:

Number of units in the job	60
Total machine-hours	300
Direct materials	\$ 645
Direct labor cost	\$ 9,000

The amount of overhead applied to Job M598 is closest to:

- A) \$930
- B) \$4,200
- C) \$2,340
- D) \$3,270

139) Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 624,000
Variable manufacturing overhead per machine-hour	\$ 3.10

Recently, Job M598 was completed with the following characteristics:

Number of units in the job	60
Total machine-hours	300
Direct materials	\$ 645
Direct labor cost	\$ 9,000

The total job cost for Job M598 is closest to:

- A) \$12,270
- B) \$9,645
- C) \$3,915
- D) \$12,915

140) Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 624,000
Variable manufacturing overhead per machine-hour	\$ 3.10

Recently, Job M598 was completed with the following characteristics:

Number of units in the job	60
Total machine-hours	300
Direct materials	\$ 645
Direct labor cost	\$ 9,000

The unit product cost for Job M598 is closest to:

- A) \$65.25
- B) \$160.75
- C) \$215.25
- D) \$43.05

141) Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	80,000
Total fixed manufacturing overhead cost	\$ 624,000
Variable manufacturing overhead per machine-hour	\$ 3.10

Recently, Job M598 was completed with the following characteristics:

Number of units in the job	60
Total machine-hours	300
Direct materials	\$ 645
Direct labor cost	\$ 9,000

If the company marks up its unit product costs by 40% then the selling price for a unit in Job M598 is closest to:

- A) \$321.35
- B) \$225.05
- C) \$86.10
- D) \$301.35

142) Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$58,000, variable manufacturing overhead of \$2.00 per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,640

The predetermined overhead rate is closest to:

- A) \$2.90 per machine-hour
- B) \$2.00 per machine-hour
- C) \$4.90 per machine-hour
- D) \$6.90 per machine-hour

143) Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$58,000, variable manufacturing overhead of \$2.00 per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,640

The amount of overhead applied to Job P978 is closest to:

- A) \$232
- B) \$160
- C) \$392
- D) \$552

144) Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$58,000, variable manufacturing overhead of \$2.00 per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,640

The total job cost for Job P978 is closest to:

- A) \$3,140
- B) \$892
- C) \$3,532
- D) \$3,032

145) Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$58,000, variable manufacturing overhead of \$2.00 per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,640

The unit product cost for Job P978 is closest to:

- A) \$176.60
- B) \$157.00
- C) \$44.60
- D) \$44.15

146) Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$58,000, variable manufacturing overhead of \$2.00 per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,640

If the company marks up its unit product costs by 30% then the selling price for a unit in Job P978 is closest to:

- A) \$249.58
- B) \$229.58
- C) \$204.10
- D) \$52.98

147) Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	70,000
Total fixed manufacturing overhead cost	\$ 294,000
Variable manufacturing overhead per machine-hour	\$ 2.30

Recently, Job M825 was completed with the following characteristics:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 665
Direct labor cost	\$ 1,840

The predetermined overhead rate is closest to:

- A) \$8.80 per machine-hour
- B) \$6.50 per machine-hour
- C) \$2.30 per machine-hour
- D) \$4.20 per machine-hour

148) Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	70,000
Total fixed manufacturing overhead cost	\$ 294,000
Variable manufacturing overhead per machine-hour	\$ 2.30

Recently, Job M825 was completed with the following characteristics:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 665
Direct labor cost	\$ 1,840

The amount of overhead applied to Job M825 is closest to:

- A) \$184
- B) \$520
- C) \$704
- D) \$336

149) Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	70,000
Total fixed manufacturing overhead cost	\$ 294,000
Variable manufacturing overhead per machine-hour	\$ 2.30

Recently, Job M825 was completed with the following characteristics:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 665
Direct labor cost	\$ 1,840

The total job cost for Job M825 is closest to:

- A) \$2,360
- B) \$2,505
- C) \$1,185
- D) \$3,025

150) Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	70,000
Total fixed manufacturing overhead cost	\$ 294,000
Variable manufacturing overhead per machine-hour	\$ 2.30

Recently, Job M825 was completed with the following characteristics:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 665
Direct labor cost	\$ 1,840

The unit product cost for Job M825 is closest to:

- A) \$37.81
- B) \$59.25
- C) \$151.25
- D) \$125.25

151) Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours	70,000
Total fixed manufacturing overhead cost	\$ 294,000
Variable manufacturing overhead per machine-hour	\$ 2.30

Recently, Job M825 was completed with the following characteristics:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 665
Direct labor cost	\$ 1,840

If the company marks up its unit product costs by 40% then the selling price for a unit in Job M825 is closest to:

- A) \$60.50
- B) \$175.35
- C) \$211.75
- D) \$231.75

152) Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$462,000, variable manufacturing overhead of \$2.20 per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 940
Direct labor cost	\$ 2,240

The amount of overhead applied to Job X455 is closest to:

- A) \$176
- B) \$792
- C) \$968
- D) \$616

153) Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$462,000, variable manufacturing overhead of \$2.20 per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 940
Direct labor cost	\$ 2,240

The total job cost for Job X455 is closest to:

- A) \$3,972
- B) \$1,732
- C) \$3,180
- D) \$3,032

154) Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$462,000, variable manufacturing overhead of \$2.20 per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 940
Direct labor cost	\$ 2,240

The unit product cost for Job X455 is closest to:

- A) \$86.60
- B) \$159.00
- C) \$198.60
- D) \$49.65

155) Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$462,000, variable manufacturing overhead of \$2.20 per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 940
Direct labor cost	\$ 2,240

If the company marks up its unit product costs by 20% then the selling price for a unit in Job X455 is closest to:

- A) \$258.32
- B) \$190.80
- C) \$39.72
- D) \$238.32

156) Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$237,000, variable manufacturing overhead of \$3.90 per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,160

The amount of overhead applied to Job A496 is closest to:

- A) \$1,256
- B) \$632
- C) \$944
- D) \$312

157) Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$237,000, variable manufacturing overhead of \$3.90 per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,160

The total job cost for Job A496 is closest to:

- A) \$2,660
- B) \$3,104
- C) \$3,604
- D) \$1,444

158) Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$237,000, variable manufacturing overhead of \$3.90 per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,160

The unit product cost for Job A496 is closest to:

- A) \$133.00
- B) \$72.20
- C) \$45.05
- D) \$180.20

159) Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$237,000, variable manufacturing overhead of \$3.90 per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

Number of units in the job	20
Total machine-hours	80
Direct materials	\$ 500
Direct labor cost	\$ 2,160

If the company marks up its unit product costs by 40% then the selling price for a unit in Job A496 is closest to:

- A) \$186.20
- B) \$272.28
- C) \$72.08
- D) \$252.28

160) Halbur Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	6,000	4,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 33,600	\$ 10,000	\$ 43,600
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.80	

During the most recent month, the company started and completed two jobs—Job C and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job J
Direct materials	\$ 11,300	\$ 8,100
Direct labor cost	\$ 18,500	\$ 6,300
Machining machine-hours	4,100	1,900
Customizing machine-hours	1,600	2,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job J is closest to:

- A) \$28,208
- B) \$18,748
- C) \$12,464
- D) \$15,744

161) Halbur Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	6,000	4,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 33,600	\$ 10,000	\$ 43,600
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.80	

During the most recent month, the company started and completed two jobs—Job C and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job J
Direct materials	\$ 11,300	\$ 8,100
Direct labor cost	\$ 18,500	\$ 6,300
Machining machine-hours	4,100	1,900
Customizing machine-hours	1,600	2,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job C is closest to:

- A) \$18,500
- B) \$67,192
- C) \$11,300
- D) \$37,392

162) Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	50,000
Total fixed manufacturing overhead cost	\$ 285,000
Variable manufacturing overhead per direct labor-hour	\$ 3.80

Recently, Job P513 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	20
Direct materials	\$ 710
Direct labor cost	\$ 500

The estimated total manufacturing overhead is closest to:

- A) \$475,000
- B) \$285,000
- C) \$190,000
- D) \$285,004

163) Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	50,000
Total fixed manufacturing overhead cost	\$ 285,000
Variable manufacturing overhead per direct labor-hour	\$ 3.80

Recently, Job P513 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	20
Direct materials	\$ 710
Direct labor cost	\$ 500

The predetermined overhead rate is closest to:

- A) \$13.30 per direct labor-hour
- B) \$3.80 per direct labor-hour
- C) \$9.50 per direct labor-hour
- D) \$5.70 per direct labor-hour

164) Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	50,000
Total fixed manufacturing overhead cost	\$ 285,000
Variable manufacturing overhead per direct labor-hour	\$ 3.80

Recently, Job P513 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	20
Direct materials	\$ 710
Direct labor cost	\$ 500

The amount of overhead applied to Job P513 is closest to:

- A) \$76
- B) \$190
- C) \$266
- D) \$114

165) Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours	50,000
Total fixed manufacturing overhead cost	\$ 285,000
Variable manufacturing overhead per direct labor-hour	\$ 3.80

Recently, Job P513 was completed with the following characteristics:

Number of units in the job	10
Total direct labor-hours	20
Direct materials	\$ 710
Direct labor cost	\$ 500

The total job cost for Job P513 is closest to:

- A) \$690
- B) \$900
- C) \$1,400
- D) \$1,210

166) Kubes Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$90,000, variable manufacturing overhead of \$3.50 per direct labor-hour, and 30,000 direct labor-hours. The company has provided the following data concerning Job A477 which was recently completed:

Total direct labor-hours	100
Direct materials	\$ 520
Direct labor cost	\$ 2,800

The amount of overhead applied to Job A477 is closest to:

- A) \$300
- B) \$350
- C) \$650
- D) \$1,000

167) Kubes Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$90,000, variable manufacturing overhead of \$3.50 per direct labor-hour, and 30,000 direct labor-hours. The company has provided the following data concerning Job A477 which was recently completed:

Total direct labor-hours	100
Direct materials	\$ 520
Direct labor cost	\$ 2,800

The total job cost for Job A477 is closest to:

- A) \$3,450
- B) \$1,170
- C) \$3,970
- D) \$3,320

168) Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	19,000	15,000
Direct labor-hours	4,000	8,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 77,600
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job T288. The following data were recorded for this job:

Job T288:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	40
Direct materials	\$ 730	\$ 380
Direct labor cost	\$ 900	\$ 1,200

The estimated total manufacturing overhead for the Assembly Department is closest to:

- A) \$77,600
- B) \$101,600
- C) \$56,674
- D) \$24,000

169) Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	19,000	15,000
Direct labor-hours	4,000	8,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 77,600
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job T288. The following data were recorded for this job:

Job T288:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	40
Direct materials	\$ 730	\$ 380
Direct labor cost	\$ 900	\$ 1,200

The predetermined overhead rate for the Assembly Department is closest to:

- A) \$3.00 per direct labor-hour
- B) \$12.70 per direct labor-hour
- C) \$9.70 per direct labor-hour
- D) \$5.35 per direct labor-hour

170) Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	19,000	15,000
Direct labor-hours	4,000	8,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 77,600
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job T288. The following data were recorded for this job:

Job T288:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	40
Direct materials	\$ 730	\$ 380
Direct labor cost	\$ 900	\$ 1,200

The amount of overhead applied in the Assembly Department to Job T288 is closest to:

- A) \$508.00
- B) \$101,600.00
- C) \$388.00
- D) \$120.00

171) Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	19,000	15,000
Direct labor-hours	4,000	8,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 77,600
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job T288. The following data were recorded for this job:

Job T288:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	40
Direct materials	\$ 730	\$ 380
Direct labor cost	\$ 900	\$ 1,200

The total amount of overhead applied in both departments to Job T288 is closest to:

- A) \$508
- B) \$672
- C) \$1,688
- D) \$1,180

172) Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	19,000	15,000
Direct labor-hours	4,000	8,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 77,600
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job T288. The following data were recorded for this job:

Job T288:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	40
Direct materials	\$ 730	\$ 380
Direct labor cost	\$ 900	\$ 1,200

The total job cost for Job T288 is closest to:

- A) \$672
- B) \$2,088
- C) \$2,302
- D) \$4,390

173) Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	19,000	15,000
Direct labor-hours	4,000	8,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 77,600
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job T288. The following data were recorded for this job:

Job T288:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	40
Direct materials	\$ 730	\$ 380
Direct labor cost	\$ 900	\$ 1,200

If the company marks up its manufacturing costs by 20% then the selling price for Job T288 would be closest to:

- A) \$4,390.00
- B) \$878.00
- C) \$5,268.00
- D) \$5,795.00

174) Macnamara Corporation has two manufacturing departments—Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Finishing	Total
Estimated total machine-hours (MHs)	1,000	4,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 4,800	\$ 8,800	\$ 13,600
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.90	

During the most recent month, the company started and completed two jobs—Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

	Job F	Job M
Direct materials	\$ 11,500	\$ 9,000
Direct labor cost	\$ 18,400	\$ 7,400
Casting machine-hours	700	300
Finishing machine-hours	1,600	2,400

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job F is closest to:

- A) \$4,620
- B) \$12,780
- C) \$12,420
- D) \$8,160

175) Macnamara Corporation has two manufacturing departments—Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Finishing	Total
Estimated total machine-hours (MHs)	1,000	4,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 4,800	\$ 8,800	\$ 13,600
Estimated variable manufacturing overhead cost/ MH	\$ 1.80	\$ 2.90	

During the most recent month, the company started and completed two jobs—Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

	Job F	Job M
Direct materials	\$ 11,500	\$ 9,000
Direct labor cost	\$ 18,400	\$ 7,400
Casting machine-hours	700	300
Finishing machine-hours	1,600	2,400

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job M is closest to:

- A) \$15,310
- B) \$47,767
- C) \$30,620
- D) \$45,930

176) Hickingbottom Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Finishing
Machine-hours	17,000	15,000
Direct labor-hours	1,000	7,000
Total fixed manufacturing overhead cost	\$ 96,900	\$ 65,800
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 3.60

During the current month the company started and finished Job M381. The following data were recorded for this job:

Job M381:	Forming	Finishing
Machine-hours	80	30
Direct labor-hours	30	40
Direct materials	\$ 840	\$ 350
Direct labor cost	\$ 750	\$ 1,000

The predetermined overhead rate for the Forming Department is closest to:

- A) \$5.70 per machine-hour
- B) \$7.70 per machine-hour
- C) \$2.00 per machine-hour
- D) \$18.70 per machine-hour

177) Hickingbottom Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Finishing
Machine-hours	17,000	15,000
Direct labor-hours	1,000	7,000
Total fixed manufacturing overhead cost	\$ 96,900	\$ 65,800
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 3.60

During the current month the company started and finished Job M381. The following data were recorded for this job:

Job M381:	Forming	Finishing
Machine-hours	80	30
Direct labor-hours	30	40
Direct materials	\$ 840	\$ 350
Direct labor cost	\$ 750	\$ 1,000

The predetermined overhead rate for the Finishing Department is closest to:

- A) \$9.40 per direct labor-hour
- B) \$13.00 per direct labor-hour
- C) \$3.60 per direct labor-hour
- D) \$5.35 per direct labor-hour

178) Hickingbottom Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Finishing
Machine-hours	17,000	15,000
Direct labor-hours	1,000	7,000
Total fixed manufacturing overhead cost	\$ 96,900	\$ 65,800
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 3.60

During the current month the company started and finished Job M381. The following data were recorded for this job:

Job M381:	Forming	Finishing
Machine-hours	80	30
Direct labor-hours	30	40
Direct materials	\$ 840	\$ 350
Direct labor cost	\$ 750	\$ 1,000

The total job cost for Job M381 is closest to:

- A) \$2,206
- B) \$616
- C) \$4,076
- D) \$1,870

179) Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 136,800	\$ 69,600
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.20

During the current month the company started and finished Job K928. The following data were recorded for this job:

Job K928:	Machining	Finishing
Machine-hours	90	10
Direct labor-hours	30	50
Direct materials	\$ 775	\$ 415
Direct labor cost	\$ 630	\$ 1,050

The estimated total manufacturing overhead for the Machining Department is closest to:

- A) \$136,800
- B) \$34,200
- C) \$171,000
- D) \$359,100

180) Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 136,800	\$ 69,600
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.20

During the current month the company started and finished Job K928. The following data were recorded for this job:

Job K928:	Machining	Finishing
Machine-hours	90	10
Direct labor-hours	30	50
Direct materials	\$ 775	\$ 415
Direct labor cost	\$ 630	\$ 1,050

The predetermined overhead rate for the Machining Department is closest to:

- A) \$7.20 per machine-hour
- B) \$9.00 per machine-hour
- C) \$21.38 per machine-hour
- D) \$1.80 per machine-hour

181) Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 136,800	\$ 69,600
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.20

During the current month the company started and finished Job K928. The following data were recorded for this job:

Job K928:	Machining	Finishing
Machine-hours	90	10
Direct labor-hours	30	50
Direct materials	\$ 775	\$ 415
Direct labor cost	\$ 630	\$ 1,050

The amount of overhead applied in the Machining Department to Job K928 is closest to:

- A) \$783.00
- B) \$810.00
- C) \$162.00
- D) \$171,000.00

182) Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 136,800	\$ 69,600
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.20

During the current month the company started and finished Job K928. The following data were recorded for this job:

Job K928:	Machining	Finishing
Machine-hours	90	10
Direct labor-hours	30	50
Direct materials	\$ 775	\$ 415
Direct labor cost	\$ 630	\$ 1,050

The total amount of overhead applied in both departments to Job K928 is closest to:

- A) \$1,405
- B) \$2,000
- C) \$810
- D) \$595

183) Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 136,800	\$ 69,600
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.20

During the current month the company started and finished Job K928. The following data were recorded for this job:

Job K928:	Machining	Finishing
Machine-hours	90	10
Direct labor-hours	30	50
Direct materials	\$ 775	\$ 415
Direct labor cost	\$ 630	\$ 1,050

The total job cost for Job K928 is closest to:

- A) \$810
- B) \$4,275
- C) \$2,060
- D) \$2,215

184) Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	12,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 136,800	\$ 69,600
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.20

During the current month the company started and finished Job K928. The following data were recorded for this job:

Job K928:	Machining	Finishing
Machine-hours	90	10
Direct labor-hours	30	50
Direct materials	\$ 775	\$ 415
Direct labor cost	\$ 630	\$ 1,050

If the company marks up its manufacturing costs by 20% then the selling price for Job K928 would be closest to:

- A) \$4,275.00
- B) \$5,643.00
- C) \$5,130.00
- D) \$855.00

185) Janicki Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	1,000	9,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 4,800	\$ 23,400	\$ 28,200
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job J
Direct materials	\$ 12,000	\$ 7,700
Direct labor cost	\$ 20,700	\$ 6,400
Machining machine-hours	700	300
Customizing machine-hours	3,600	5,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job A is closest to:

- A) \$90,707
- B) \$27,487
- C) \$82,461
- D) \$54,974

186) Janicki Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	1,000	9,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 4,800	\$ 23,400	\$ 28,200
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job J
Direct materials	\$ 12,000	\$ 7,700
Direct labor cost	\$ 20,700	\$ 6,400
Machining machine-hours	700	300
Customizing machine-hours	3,600	5,400

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job J is closest to:

- A) \$71,983
- B) \$65,439
- C) \$43,626
- D) \$21,813

187) Janicki Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	1,000	9,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 4,800	\$ 23,400	\$ 28,200
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job J
Direct materials	\$ 12,000	\$ 7,700
Direct labor cost	\$ 20,700	\$ 6,400
Machining machine-hours	700	300
Customizing machine-hours	3,600	5,400

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job A is closest to:

- A) \$27,595
- B) \$87,752
- C) \$82,785
- D) \$55,190

188) Janicki Corporation has two manufacturing departments—Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Customizing	Total
Estimated total machine-hours (MHs)	1,000	9,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 4,800	\$ 23,400	\$ 28,200
Estimated variable manufacturing overhead cost per MH	\$ 1.10	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job J
Direct materials	\$ 12,000	\$ 7,700
Direct labor cost	\$ 20,700	\$ 6,400
Machining machine-hours	700	300
Customizing machine-hours	3,600	5,400

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of 50% on manufacturing cost to establish selling prices. The calculated selling price for Job J is closest to:

- A) \$65,115
- B) \$67,720
- C) \$21,705
- D) \$43,410

189) Comans Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	18,000	13,000
Direct labor-hours	4,000	7,000
Total fixed manufacturing overhead cost	\$ 113,400	\$ 64,400
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

During the current month the company started and finished Job A319. The following data were recorded for this job:

Job A319:	Milling	Customizing
Machine-hours	60	10
Direct labor-hours	20	60
Direct materials	\$ 655	\$ 305
Direct labor cost	\$ 400	\$ 1,200

The amount of overhead applied in the Milling Department to Job A319 is closest to:

- A) \$142,200.00
- B) \$552.00
- C) \$96.00
- D) \$474.00

190) Comans Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	18,000	13,000
Direct labor-hours	4,000	7,000
Total fixed manufacturing overhead cost	\$ 113,400	\$ 64,400
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

During the current month the company started and finished Job A319. The following data were recorded for this job:

Job A319:	Milling	Customizing
Machine-hours	60	10
Direct labor-hours	20	60
Direct materials	\$ 655	\$ 305
Direct labor cost	\$ 400	\$ 1,200

The amount of overhead applied in the Customizing Department to Job A319 is closest to:

- A) \$234.00
- B) \$786.00
- C) \$552.00
- D) \$91,700.00

191) Comans Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	18,000	13,000
Direct labor-hours	4,000	7,000
Total fixed manufacturing overhead cost	\$ 113,400	\$ 64,400
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

During the current month the company started and finished Job A319. The following data were recorded for this job:

Job A319:	Milling	Customizing
Machine-hours	60	10
Direct labor-hours	20	60
Direct materials	\$ 655	\$ 305
Direct labor cost	\$ 400	\$ 1,200

If the company marks up its manufacturing costs by 20% then the selling price for Job A319 would be closest to:

- A) \$5,042.00
- B) \$4,584.00
- C) \$3,820.00
- D) \$764.00

192) Sanderlin Corporation has two manufacturing departments—Machining and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Finishing	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 26,500	\$ 13,500	\$ 40,000
Estimated variable manufacturing overhead cost per MH	\$ 2.00	\$ 3.00	

During the most recent month, the company started and completed two jobs—Job C and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job L
Direct materials	\$ 12,500	\$ 8,200
Direct labor cost	\$ 20,200	\$ 6,400
Machining machine-hours	3,400	1,600
Finishing machine-hours	2,000	3,000

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job L is closest to:

- A) \$11,680
- B) \$28,780
- C) \$17,100
- D) \$29,900

193) Sanderlin Corporation has two manufacturing departments—Machining and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Machining	Finishing	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 26,500	\$ 13,500	\$ 40,000
Estimated variable manufacturing overhead cost per MH	\$ 2.00	\$ 3.00	

During the most recent month, the company started and completed two jobs—Job C and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job C	Job L
Direct materials	\$ 12,500	\$ 8,200
Direct labor cost	\$ 20,200	\$ 6,400
Machining machine-hours	3,400	1,600
Finishing machine-hours	2,000	3,000

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of 20% on manufacturing cost to establish selling prices. The calculated selling price for Job C is closest to:

- A) \$87,666
- B) \$68,920
- C) \$13,784
- D) \$82,704

194) Collini Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	17,000	15,000
Direct labor-hours	3,000	6,000
Total fixed manufacturing overhead cost	\$ 102,000	\$ 61,200
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 4.10

During the current month the company started and finished Job T268. The following data were recorded for this job:

Job T268:	Machining	Customizing
Machine-hours	80	30
Direct labor-hours	30	50
Direct materials	\$ 720	\$ 380
Direct labor cost	\$ 900	\$ 1,500

The total amount of overhead applied in both departments to Job T268 is closest to:

- A) \$616
- B) \$715
- C) \$2,046
- D) \$1,331

195) Collini Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	17,000	15,000
Direct labor-hours	3,000	6,000
Total fixed manufacturing overhead cost	\$ 102,000	\$ 61,200
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 4.10

During the current month the company started and finished Job T268. The following data were recorded for this job:

Job T268:	Machining	Customizing
Machine-hours	80	30
Direct labor-hours	30	50
Direct materials	\$ 720	\$ 380
Direct labor cost	\$ 900	\$ 1,500

The total job cost for Job T268 is closest to:

- A) \$2,595
- B) \$616
- C) \$4,831
- D) \$2,236

196) Collini Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	17,000	15,000
Direct labor-hours	3,000	6,000
Total fixed manufacturing overhead cost	\$ 102,000	\$ 61,200
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 4.10

During the current month the company started and finished Job T268. The following data were recorded for this job:

Job T268:	Machining	Customizing
Machine-hours	80	30
Direct labor-hours	30	50
Direct materials	\$ 720	\$ 380
Direct labor cost	\$ 900	\$ 1,500

If the company marks up its manufacturing costs by 40% then the selling price for Job T268 would be closest to:

- A) \$1,932.40
- B) \$6,763.40
- C) \$4,831.00
- D) \$7,440.00

197) Heroux Corporation has two manufacturing departments—Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Customizing	Total
Estimated total machine-hours (MHs)	3,000	7,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 16,500	\$ 20,300	\$ 36,800
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job H
Direct materials	\$ 12,800	\$ 6,700
Direct labor cost	\$ 24,300	\$ 7,800
Forming machine-hours	2,000	1,000
Customizing machine-hours	2,800	4,200

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job A is closest to:

- A) \$28,512
- B) \$16,632
- C) \$11,880
- D) \$17,664

198) Heroux Corporation has two manufacturing departments—Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Customizing	Total
Estimated total machine-hours (MHs)	3,000	7,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 16,500	\$ 20,300	\$ 36,800
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job H
Direct materials	\$ 12,800	\$ 6,700
Direct labor cost	\$ 24,300	\$ 7,800
Forming machine-hours	2,000	1,000
Customizing machine-hours	2,800	4,200

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job H is closest to:

- A) \$19,136
- B) \$5,940
- C) \$30,888
- D) \$24,948

199) Heroux Corporation has two manufacturing departments—Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Customizing	Total
Estimated total machine-hours (MHs)	3,000	7,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 16,500	\$ 20,300	\$ 36,800
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job H
Direct materials	\$ 12,800	\$ 6,700
Direct labor cost	\$ 24,300	\$ 7,800
Forming machine-hours	2,000	1,000
Customizing machine-hours	2,800	4,200

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job A is closest to:

- A) \$14,400
- B) \$15,120
- C) \$28,512
- D) \$29,520

200) Heroux Corporation has two manufacturing departments—Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Customizing	Total
Estimated total machine-hours (MHs)	3,000	7,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 16,500	\$ 20,300	\$ 36,800
Estimated variable manufacturing overhead cost per MH	\$ 1.70	\$ 2.50	

During the most recent month, the company started and completed two jobs—Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job H
Direct materials	\$ 12,800	\$ 6,700
Direct labor cost	\$ 24,300	\$ 7,800
Forming machine-hours	2,000	1,000
Customizing machine-hours	2,800	4,200

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job H is closest to:

- A) \$22,680
- B) \$30,888
- C) \$29,880
- D) \$7,200

201) Tiff Corporation has two production departments, Casting and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Customizing
Machine-hours	17,000	10,000
Direct labor-hours	1,000	5,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 46,500
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.80

During the current month the company started and finished Job P131. The following data were recorded for this job:

Job P131:	Machining	Customizing
Machine-hours	90	20
Direct labor-hours	20	60

The predetermined overhead rate for the Casting Department is closest to:

- A) \$9.40 per machine-hour
- B) \$7.60 per machine-hour
- C) \$1.80 per machine-hour
- D) \$31.96 per machine-hour

202) Tiff Corporation has two production departments, Casting and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Customizing
Machine-hours	17,000	10,000
Direct labor-hours	1,000	5,000
Total fixed manufacturing overhead cost	\$ 129,200	\$ 46,500
Variable manufacturing overhead per machine-hour	\$ 1.80	
Variable manufacturing overhead per direct labor-hour		\$ 3.80

During the current month the company started and finished Job P131. The following data were recorded for this job:

Job P131:	Machining	Customizing
Machine-hours	90	20
Direct labor-hours	20	60

The amount of overhead applied in the Assembly Department to Job P131 is closest to:

- A) \$228.00
- B) \$558.00
- C) \$65,500.00
- D) \$786.00

203) Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	16,000	11,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 104,000	\$ 56,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job T272. The following data were recorded for this job:

Job T272:	Machining	Customizing
Machine-hours	60	30
Direct labor-hours	10	60

The estimated total manufacturing overhead for the Machining Department is closest to:

- A) \$137,600
- B) \$104,000
- C) \$33,600
- D) \$310,933

204) Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	16,000	11,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 104,000	\$ 56,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job T272. The following data were recorded for this job:

Job T272:	Machining	Customizing
Machine-hours	60	30
Direct labor-hours	10	60

The estimated total manufacturing overhead for the Customizing Department is closest to:

- A) \$40,950
- B) \$19,800
- C) \$56,400
- D) \$76,200

205) Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	16,000	11,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 104,000	\$ 56,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job T272. The following data were recorded for this job:

Job T272:	Machining	Customizing
Machine-hours	60	30
Direct labor-hours	10	60

The predetermined overhead rate for the Machining Department is closest to:

- A) \$22.93 per machine-hour
- B) \$6.50 per machine-hour
- C) \$2.10 per machine-hour
- D) \$8.60 per machine-hour

206) Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	16,000	11,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 104,000	\$ 56,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job T272. The following data were recorded for this job:

Job T272:	Machining	Customizing
Machine-hours	60	30
Direct labor-hours	10	60

The predetermined overhead rate for the Customizing Department is closest to:

- A) \$3.30 per direct labor-hour
- B) \$12.70 per direct labor-hour
- C) \$9.40 per direct labor-hour
- D) \$4.76 per direct labor-hour

207) Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	16,000	11,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 104,000	\$ 56,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job T272. The following data were recorded for this job:

Job T272:	Machining	Customizing
Machine-hours	60	30
Direct labor-hours	10	60

The amount of overhead applied in the Machining Department to Job T272 is closest to:

- A) \$137,600.00
- B) \$126.00
- C) \$516.00
- D) \$564.00

208) Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Customizing
Machine-hours	16,000	11,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 104,000	\$ 56,400
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 3.30

During the current month the company started and finished Job T272. The following data were recorded for this job:

Job T272:	Machining	Customizing
Machine-hours	60	30
Direct labor-hours	10	60

The amount of overhead applied in the Customizing Department to Job T272 is closest to:

- A) \$76,200.00
- B) \$762.00
- C) \$564.00
- D) \$198.00

209) Stoke Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	20,000	15,000
Direct labor-hours	2,000	7,000
Total fixed manufacturing overhead cost	\$ 138,000	\$ 58,100
Variable manufacturing overhead per machine-hour	\$ 2.30	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job A460. The following data were recorded for this job:

Job A460:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	50

The amount of overhead applied in the Forming Department to Job A460 is closest to:

- A) \$184,000.00
- B) \$184.00
- C) \$736.00
- D) \$664.00

210) Stoke Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	20,000	15,000
Direct labor-hours	2,000	7,000
Total fixed manufacturing overhead cost	\$ 138,000	\$ 58,100
Variable manufacturing overhead per machine-hour	\$ 2.30	
Variable manufacturing overhead per direct labor-hour		\$ 3.00

During the current month the company started and finished Job A460. The following data were recorded for this job:

Job A460:	Forming	Assembly
Machine-hours	80	10
Direct labor-hours	30	50

The amount of overhead applied in the Assembly Department to Job A460 is closest to:

- A) \$415.00
- B) \$150.00
- C) \$565.00
- D) \$79,100.00

211) Vanliere Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	11,000
Direct labor-hours	3,000	6,000
Total fixed manufacturing overhead cost	\$ 138,700	\$ 52,800
Variable manufacturing overhead per machine-hour	\$ 1.90	
Variable manufacturing overhead per direct labor-hour		\$ 3.80

During the current month the company started and finished Job A803. The following data were recorded for this job:

Job A803:	Machining	Finishing
Machine-hours	90	20
Direct labor-hours	20	60

The predetermined overhead rate for the Finishing Department is closest to:

- A) \$8.80 per direct labor-hour
- B) \$3.98 per direct labor-hour
- C) \$12.60 per direct labor-hour
- D) \$3.80 per direct labor-hour

212) Vanliere Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Machining	Finishing
Machine-hours	19,000	11,000
Direct labor-hours	3,000	6,000
Total fixed manufacturing overhead cost	\$ 138,700	\$ 52,800
Variable manufacturing overhead per machine-hour	\$ 1.90	
Variable manufacturing overhead per direct labor-hour		\$ 3.80

During the current month the company started and finished Job A803. The following data were recorded for this job:

Job A803:	Machining	Finishing
Machine-hours	90	20
Direct labor-hours	20	60

The amount of overhead applied in the Machining Department to Job A803 is closest to:

- A) \$828.00
- B) \$792.00
- C) \$171.00
- D) \$174,800.00

213) Ahlheim Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	16,000	15,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 102,400	\$ 55,200
Variable manufacturing overhead per machine-hour	\$ 2.30	
Variable manufacturing overhead per direct labor-hour		\$ 4.50

During the current month the company started and finished Job T924. The following data were recorded for this job:

Job T924:	Forming	Assembly
Machine-hours	70	20
Direct labor-hours	30	40
Direct materials	\$ 870	\$ 385
Direct labor cost	\$ 630	\$ 840

The estimated total manufacturing overhead for the Forming Department is closest to:

- A) \$36,800
- B) \$102,400
- C) \$309,867
- D) \$139,200

214) Ahlheim Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	16,000	15,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 102,400	\$ 55,200
Variable manufacturing overhead per machine-hour	\$ 2.30	
Variable manufacturing overhead per direct labor-hour		\$ 4.50

During the current month the company started and finished Job T924. The following data were recorded for this job:

Job T924:	Forming	Assembly
Machine-hours	70	20
Direct labor-hours	30	40
Direct materials	\$ 870	\$ 385
Direct labor cost	\$ 630	\$ 840

The estimated total manufacturing overhead for the Assembly Department is closest to:

- A) \$27,000
- B) \$55,200
- C) \$82,200
- D) \$47,700

215) Ahlheim Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Assembly
Machine-hours	16,000	15,000
Direct labor-hours	2,000	6,000
Total fixed manufacturing overhead cost	\$ 102,400	\$ 55,200
Variable manufacturing overhead per machine-hour	\$ 2.30	
Variable manufacturing overhead per direct labor-hour		\$ 4.50

During the current month the company started and finished Job T924. The following data were recorded for this job:

Job T924:	Forming	Assembly
Machine-hours	70	20
Direct labor-hours	30	40
Direct materials	\$ 870	\$ 385
Direct labor cost	\$ 630	\$ 840

The total amount of overhead applied in both departments to Job T924 is closest to:

- A) \$1,157
- B) \$548
- C) \$609
- D) \$1,705

216) Merati Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 28,000	\$ 10,500	\$ 38,500
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job L
Forming machine-hours	3,400	1,600
Assembly machine-hours	2,000	3,000

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Forming Department is closest to:

- A) \$5.60
- B) \$7.40
- C) \$1.80
- D) \$6.05

217) Merati Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 28,000	\$ 10,500	\$ 38,500
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job L
Forming machine-hours	3,400	1,600
Assembly machine-hours	2,000	3,000

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Assembly Department is closest to:

- A) \$2.60
- B) \$4.70
- C) \$6.05
- D) \$2.10

218) Merati Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 28,000	\$ 10,500	\$ 38,500
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job L
Forming machine-hours	3,400	1,600
Assembly machine-hours	2,000	3,000

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job B is closest to:

- A) \$9,400
- B) \$25,160
- C) \$32,670
- D) \$34,560

219) Merati Corporation has two manufacturing departments—Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Forming	Assembly	Total
Estimated total machine-hours (MHs)	5,000	5,000	10,000
Estimated total fixed manufacturing overhead cost	\$ 28,000	\$ 10,500	\$ 38,500
Estimated variable manufacturing overhead cost per MH	\$ 1.80	\$ 2.60	

During the most recent month, the company started and completed two jobs—Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

	Job A	Job L
Forming machine-hours	3,400	1,600
Assembly machine-hours	2,000	3,000

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. The manufacturing overhead applied to Job L is closest to:

- A) \$27,830
- B) \$11,840
- C) \$25,940
- D) \$14,100

220) Barbeau Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	17,000	13,000
Direct labor-hours	2,000	5,000
Total fixed manufacturing overhead cost	\$ 119,000	\$ 42,000
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

During the current month the company started and finished Job A492. The following data were recorded for this job:

Job A492:	Milling	Customizing
Machine-hours	90	20
Direct labor-hours	20	50

The estimated total manufacturing overhead for the Customizing Department is closest to:

- A) \$63,500
- B) \$21,500
- C) \$42,000
- D) \$33,853

221) Barbeau Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	17,000	13,000
Direct labor-hours	2,000	5,000
Total fixed manufacturing overhead cost	\$ 119,000	\$ 42,000
Variable manufacturing overhead per machine-hour	\$ 1.60	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

During the current month the company started and finished Job A492. The following data were recorded for this job:

Job A492:	Milling	Customizing
Machine-hours	90	20
Direct labor-hours	20	50

The amount of overhead applied in the Milling Department to Job A492 is closest to:

- A) \$146,200.00
- B) \$144.00
- C) \$756.00
- D) \$774.00

222) Kroeker Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	17,000	12,000
Direct labor-hours	1,000	9,000
Total fixed manufacturing overhead cost	\$ 112,200	\$ 81,000
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

During the current month the company started and finished Job T898. The following data were recorded for this job:

Job T898:	Milling	Customizing
Machine-hours	80	30
Direct labor-hours	20	50

The estimated total manufacturing overhead for the Milling Department is closest to:

- A) \$240,833
- B) \$141,100
- C) \$28,900
- D) \$112,200

223) Kroeker Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Customizing
Machine-hours	17,000	12,000
Direct labor-hours	1,000	9,000
Total fixed manufacturing overhead cost	\$ 112,200	\$ 81,000
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

During the current month the company started and finished Job T898. The following data were recorded for this job:

Job T898:	Milling	Customizing
Machine-hours	80	30
Direct labor-hours	20	50

The amount of overhead applied in the Customizing Department to Job T898 is closest to:

- A) \$450.00
- B) \$119,700.00
- C) \$665.00
- D) \$215.00

224) Petty Corporation has two production departments, Milling and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Finishing
Machine-hours	20,000	14,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 148,000	\$ 88,000
Variable manufacturing overhead per machine-hour	\$ 1.90	
Variable manufacturing overhead per direct labor-hour		\$ 3.60

The estimated total manufacturing overhead for the Milling Department is closest to:

- A) \$408,000
- B) \$38,000
- C) \$148,000
- D) \$186,000

225) Petty Corporation has two production departments, Milling and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Milling	Finishing
Machine-hours	20,000	14,000
Direct labor-hours	2,000	8,000
Total fixed manufacturing overhead cost	\$ 148,000	\$ 88,000
Variable manufacturing overhead per machine-hour	\$ 1.90	
Variable manufacturing overhead per direct labor-hour		\$ 3.60

The predetermined overhead rate for the Finishing Department is closest to:

- A) \$5.84 per direct labor-hour
- B) \$3.60 per direct labor-hour
- C) \$11.00 per direct labor-hour
- D) \$14.60 per direct labor-hour

226) Garza Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Customizing
Machine-hours	20,000	13,000
Direct labor-hours	1,000	7,000
Total fixed manufacturing overhead cost	\$ 152,000	\$ 68,600
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

The estimated total manufacturing overhead for the Customizing Department is closest to:

- A) \$54,110
- B) \$30,100
- C) \$98,700
- D) \$68,600

227) Garza Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Customizing
Machine-hours	20,000	13,000
Direct labor-hours	1,000	7,000
Total fixed manufacturing overhead cost	\$ 152,000	\$ 68,600
Variable manufacturing overhead per machine-hour	\$ 2.10	
Variable manufacturing overhead per direct labor-hour		\$ 4.30

The predetermined overhead rate for the Casting Department is closest to:

- A) \$9.70 per machine-hour
- B) \$7.60 per machine-hour
- C) \$2.10 per machine-hour
- D) \$27.71 per machine-hour

228) Marciante Corporation has two production departments, Casting and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Finishing
Machine-hours	17,000	10,000
Direct labor-hours	2,000	5,000
Total fixed manufacturing overhead cost	\$ 105,400	\$ 52,000
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

The estimated total manufacturing overhead for the Casting Department is closest to:

- A) \$387,260
- B) \$134,300
- C) \$28,900
- D) \$105,400

229) Marciante Corporation has two production departments, Casting and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Casting	Finishing
Machine-hours	17,000	10,000
Direct labor-hours	2,000	5,000
Total fixed manufacturing overhead cost	\$ 105,400	\$ 52,000
Variable manufacturing overhead per machine-hour	\$ 1.70	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

The estimated total manufacturing overhead for the Finishing Department is closest to:

- A) \$71,500
- B) \$52,000
- C) \$34,794
- D) \$19,500

230) Jurica Corporation has two production departments, Forming and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Customizing
Machine-hours	19,000	15,000
Direct labor-hours	4,000	6,000
Total fixed manufacturing overhead cost	\$ 100,700	\$ 63,000
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

The predetermined overhead rate for the Forming Department is closest to:

- A) \$23.12 per machine-hour
- B) \$2.00 per machine-hour
- C) \$5.30 per machine-hour
- D) \$7.30 per machine-hour

231) Jurica Corporation has two production departments, Forming and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

	Forming	Customizing
Machine-hours	19,000	15,000
Direct labor-hours	4,000	6,000
Total fixed manufacturing overhead cost	\$ 100,700	\$ 63,000
Variable manufacturing overhead per machine-hour	\$ 2.00	
Variable manufacturing overhead per direct labor-hour		\$ 3.90

The predetermined overhead rate for the Customizing Department is closest to:

- A) \$4.55 per direct labor-hour
- B) \$3.90 per direct labor-hour
- C) \$10.50 per direct labor-hour
- D) \$14.40 per direct labor-hour

232) Claybrooks Corporation has two manufacturing departments—Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Assembly	Total
Estimated total machine-hours (MHs)	3,000	2,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 17,700	\$ 5,800	\$ 23,500
Estimated variable manufacturing overhead cost per MH	\$ 1.50	\$ 2.20	

Assume that the company uses a *plantwide* predetermined manufacturing overhead rate based on machine-hours. That predetermined manufacturing overhead rate is closest to:

- A) \$4.70
- B) \$7.40
- C) \$6.48
- D) \$3.70

233) Claybrooks Corporation has two manufacturing departments—Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Assembly	Total
Estimated total machine-hours (MHs)	3,000	2,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 17,700	\$ 5,800	\$ 23,500
Estimated variable manufacturing overhead cost per MH	\$ 1.50	\$ 2.20	

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Casting Department is closest to:

- A) \$1.50
- B) \$7.40
- C) \$5.90
- D) \$6.48

234) Claybrooks Corporation has two manufacturing departments—Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

	Casting	Assembly	Total
Estimated total machine-hours (MHs)	3,000	2,000	5,000
Estimated total fixed manufacturing overhead cost	\$ 17,700	\$ 5,800	\$ 23,500
Estimated variable manufacturing overhead cost per MH	\$ 1.50	\$ 2.20	

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Assembly Department is closest to:

- A) \$2.90
- B) \$6.48
- C) \$5.10
- D) \$2.20

235) Henkes Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. At the beginning of the most recently completed year, the company estimated the labor-hours for the upcoming year at 66,000 labor-hours. The estimated variable manufacturing overhead was \$8.41 per labor-hour and the estimated total fixed manufacturing overhead was \$1,533,180. The actual labor-hours for the year turned out to be 68,400 labor-hours.

Required:

Compute the company's predetermined overhead rate for the recently completed year.

236) Mccaughan Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. Data for the most recently completed year appear below:

Estimates made at the beginning of the year:	
Estimated labor-hours	37,000
Estimated variable manufacturing overhead	\$ 4.43 per labor-hour
Estimated total fixed manufacturing overhead	\$ 705,220
Actual labor-hours for the year	32,100

Required:

Compute the company's predetermined overhead rate for the recently completed year.

237) Moscone Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. At the beginning of the most recently completed year, the company estimated the labor-hours for the upcoming year at 78,000 labor-hours. The estimated variable manufacturing overhead was \$9.99 per labor-hour and the estimated total fixed manufacturing overhead was \$985,920.

Required:

Compute the company's predetermined overhead rate.

238) Lightner Corporation bases its predetermined overhead rate on the estimated machine-hours for the upcoming year. Data for the upcoming year appear below:

Estimated machine-hours	50,000
Estimated variable manufacturing overhead	\$ 8.82 per labor-hour
Estimated total fixed manufacturing overhead	\$ 1,077,000

Required:

Compute the company's predetermined overhead rate.

239) Job 243 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$ 48,870
Direct labor-hours	450 labor-hours
Direct labor wage rate	\$ 13 per labor-hour
Machine-hours	486 machine-hours
Number of units completed	2,700 units

The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$11 per machine-hour.

Required:

Compute the unit product cost that would appear on the job cost sheet for this job.

240) Job 652 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$ 59,400
Direct labor-hours	1,224 DLHs
Direct labor wage rate	\$ 15 per DLH
Number of units completed	3,600 units

The company applies manufacturing overhead on the basis of direct labor-hours. The predetermined overhead rate is \$35 per direct labor-hour.

Required:

Compute the unit product cost that would appear on the job cost sheet for this job.

Managerial Accounting, 16e (Garrison)
Appendix 2A Activity-Based Absorption Costing

1) Feauto Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, I63E and E76I, about which it has provided the following data:

Direct materials per unit	\$ 19.90	\$ 54.40
Direct labor per unit	\$ 12.00	\$ 31.50
Direct labor-hours per unit	0.80	2.10
Annual production (units)	30,000	10,000

The company's estimated total manufacturing overhead for the year is \$2,063,250 and the company's estimated total direct labor-hours for the year is 45,000.

The company is considering using a form of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Assembling products (DLHs)	\$ 720,000
Preparing batches (batches)	263,250
Product support (product variations)	1,080,000
Total	<u>\$ 2,063,250</u>

	Expected Activity		
	I63E	E76I	Total
DLHs	24,000	21,000	45,000
Batches	1,080	675	1,755
Product variations	2,115	1,485	3,600

The manufacturing overhead that would be applied to a unit of product I63E under the company's traditional costing system is closest to:

- A) \$12.80
- B) \$39.35
- C) \$76.03
- D) \$36.68

2) Feauto Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, I63E and E76I, about which it has provided the following data:

	I63E	E76I
Direct materials per unit	\$ 19.90	\$ 54.40
Direct labor per unit	\$ 12.00	\$ 31.50
Direct labor-hours per unit	0.80	2.10
Annual production (units)	30,000	10,000

The company's estimated total manufacturing overhead for the year is \$2,063,250 and the company's estimated total direct labor-hours for the year is 45,000.

The company is considering using a form of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Assembling products (DLHs)	\$ 720,000
Preparing batches (batches)	263,250
Product support (product variations)	1,080,000
Total	<u>\$ 2,063,250</u>

	Expected Activity		
	I63E	E76I	Total
DLHs	24,000	21,000	45,000
Batches	1,080	675	1,755
Product variations	2,115	1,485	3,600

The manufacturing overhead that would be applied to a unit of product E76I under the activity-based costing system is closest to:

- A) \$88.28
- B) \$96.29
- C) \$184.57
- D) \$10.13

3) Coudriet Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, P93S and N40S, about which it has provided the following data:

	P93S	N40S
Direct materials per unit	\$ 21.90	\$ 54.80
Direct labor per unit	\$ 8.80	\$ 13.20
Direct labor-hours per unit	0.80	1.20
Annual production (units)	35,000	15,000

The company's estimated total manufacturing overhead for the year is \$2,172,580 and the company's estimated total direct labor-hours for the year is 46,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Direct labor support (DLHs)	\$ 552,000
Setting up machines (setups)	419,980
Part administration (part types)	1,200,600
Total	<u>\$ 2,172,580</u>

	Expected Activity		
	P93S	N40S	Total
DLHs	28,000	18,000	46,000
Setups	2,162	1,656	3,818
Part types	1,886	2,116	4,002

The unit product cost of product P93S under the company's traditional costing system is closest to:

- A) \$68.48
- B) \$63.26
- C) \$30.70
- D) \$40.30

4) Coudriet Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, P93S and N40S, about which it has provided the following data:

	P93S	N40S
Direct materials per unit	\$ 21.90	\$ 54.80
Direct labor per unit	\$ 8.80	\$ 13.20
Direct labor-hours per unit	0.80	1.20
Annual production (units)	35,000	15,000

The company's estimated total manufacturing overhead for the year is \$2,172,580 and the company's estimated total direct labor-hours for the year is 46,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Direct labor support (DLHs)	\$ 552,000
Setting up machines (setups)	419,980
Part administration (part types)	1,200,600
Total	<u>\$ 2,172,580</u>

	Expected Activity		
	P93S	N40S	Total
DLHs	28,000	18,000	46,000
Setups	2,162	1,656	3,818
Part types	1,886	2,116	4,002

The unit product cost of product N40S under the activity-based costing system is closest to:

- A) \$68.00
- B) \$68.86
- C) \$124.68
- D) \$136.86

5) Poma Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, R78S and N32Y, about which it has provided the following data:

	R78S	N32Y
Direct materials per unit	\$ 27.20	\$ 54.70
Direct labor per unit	\$ 8.80	\$ 22.00
Direct labor-hours per unit	0.4	1.0
Annual production (units)	35,000	10,000

The company's estimated total manufacturing overhead for the year is \$1,427,040 and the company's estimated total direct labor-hours for the year is 24,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Assembling products (DLHs)	\$ 672,000
Preparing batches (batches)	255,840
Product support (product variations)	499,200
Total	<u>\$ 1,427,040</u>

	Expected Activity		
	R78S	N32Y	Total
DLHs	14,000	10,000	24,000
Batches	816	1,152	1,968
Product variations	840	408	1,248

The unit product cost of product R78S under the company's traditional costing system is closest to:

- A) \$36.00
- B) \$59.83
- C) \$47.20
- D) \$59.78

6) Poma Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, R78S and N32Y, about which it has provided the following data:

	R78S	N32Y
Direct materials per unit	\$ 27.20	\$ 54.70
Direct labor per unit	\$ 8.80	\$ 22.00
Direct labor-hours per unit	0.4	1.0
Annual production (units)	35,000	10,000

The company's estimated total manufacturing overhead for the year is \$1,427,040 and the company's estimated total direct labor-hours for the year is 24,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Assembling products (DLHs)	\$ 672,000
Preparing batches (batches)	255,840
Product support (product variations)	499,200
Total	<u>\$ 1,427,040</u>

	Expected Activity		
	R78S	N32Y	Total
DLHs	14,000	10,000	24,000
Batches	816	1,152	1,968
Product variations	840	408	1,248

The unit product cost of product N32Y under the activity-based costing system is closest to:

- A) \$136.00
- B) \$76.70
- C) \$59.30
- D) \$136.16

7) Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is \$68,756.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools—Activity 1, Activity 2, and General Factory—with estimated overhead costs and expected activity as follows:

Activity Cost Pool	Estimated Overhead Costs	Expected Activity		
		Product A	Product B	Total
Activity 1	\$ 31,031	1,000	300	1,300
Activity 2	\$ 22,249	1,600	300	1,900
General Factory	\$ 15,476	200	200	400
Total	<u>\$ 68,756</u>			

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The predetermined overhead rate under the traditional costing system is closest to:

- A) \$11.71
- B) \$38.69
- C) \$171.89
- D) \$23.87

8) Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is \$68,756.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools—Activity 1, Activity 2, and General Factory—with estimated overhead costs and expected activity as follows:

Activity Cost Pool	Estimated Overhead Costs	Expected Activity		
		Product A	Product B	Total
Activity 1	\$ 31,031	1,000	300	1,300
Activity 2	\$ 22,249	1,600	300	1,900
General Factory	\$ 15,476	200	200	400
Total	<u>\$ 68,756</u>			

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The overhead cost per unit of Product B under the traditional costing system is closest to:

- A) \$2.34
- B) \$7.74
- C) \$4.77
- D) \$34.38

9) Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is \$68,756.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools—Activity 1, Activity 2, and General Factory—with estimated overhead costs and expected activity as follows:

Activity Cost Pool	Estimated Overhead Costs	Expected Activity		
		Product A	Product B	Total
Activity 1	\$ 31,031	1,000	300	1,300
Activity 2	\$ 22,249	1,600	300	1,900
General Factory	\$ 15,476	200	200	400
Total	<u>\$ 68,756</u>			

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The predetermined overhead rate (i.e., activity rate) for Activity 2 under the activity-based costing system is closest to:

- A) \$13.91
- B) \$11.71
- C) \$74.16
- D) \$36.19

10) Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is \$68,756.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools—Activity 1, Activity 2, and General Factory—with estimated overhead costs and expected activity as follows:

Activity Cost Pool	Estimated Overhead Costs	Expected Activity		
		Product A	Product B	Total
Activity 1	\$ 31,031	1,000	300	1,300
Activity 2	\$ 22,249	1,600	300	1,900
General Factory	\$ 15,476	200	200	400
Total	<u>\$ 68,756</u>			

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The overhead cost per unit of Product B under the activity-based costing system is closest to:

- A) \$45.84
- B) \$7.74
- C) \$34.38
- D) \$18.41

11) Njombe Corporation manufactures a variety of products. In the past, Njombe has been using a traditional costing system in which the predetermined overhead rate was 150% of direct labor cost. Selling prices had been set by multiplying total product cost by 200%. Sensing that this system was distorting costs and selling prices, Njombe has decided to switch to an activity-based costing system for manufacturing overhead costs that uses the three activity cost pools listed below. Selling prices are still to be set at 200% of unit product cost under the new system. Information on these cost pools for next year are as follows:

Activity Cost Pool	Activity Measure	Estimated Activity	Estimated Overhead Cost
Machine Setups	Number of setups	400	\$ 150,000
Quality Control	Number of inspections	1,500	\$ 180,000
Other Overhead	Machine hours	30,000	\$ 480,000

Information (on a per unit basis) related to three popular products at Njombe are as follows:

	Model #19	Model #36	Model #58
Direct material cost	\$ 400	\$ 540	\$ 310
Direct labor cost	\$ 810	\$ 600	\$ 220
Number of setups	2	3	1
Number of inspections	1	3	1
Number of machine hours	4	8	10

Under the traditional costing system, what would be the selling price of one unit of Model #36?

- A) \$2,536
- B) \$2,712
- C) \$4,080
- D) \$5,506

12) Njombe Corporation manufactures a variety of products. In the past, Njombe has been using a traditional costing system in which the predetermined overhead rate was 150% of direct labor cost. Selling prices had been set by multiplying total product cost by 200%. Sensing that this system was distorting costs and selling prices, Njombe has decided to switch to an activity-based costing system for manufacturing overhead costs that uses the three activity cost pools listed below. Selling prices are still to be set at 200% of unit product cost under the new system. Information on these cost pools for next year are as follows:

Activity Cost Pool	Activity Measure	Estimated Activity	Estimated Overhead Cost
Machine Setups	Number of setups	400	\$ 150,000
Quality Control	Number of inspections	1,500	\$ 180,000
Other Overhead	Machine hours	30,000	\$ 480,000

Information (on a per unit basis) related to three popular products at Njombe are as follows:

	Model #19	Model #36	Model #58
Direct material cost	\$ 400	\$ 540	\$ 310
Direct labor cost	\$ 810	\$ 600	\$ 220
Number of setups	2	3	1
Number of inspections	1	3	1
Number of machine hours	4	8	10

Under the activity-based costing system, what would be the selling price of one unit of Model #36?

- A) \$2,536
- B) \$2,712
- C) \$4,080
- D) \$5,506

13) Njombe Corporation manufactures a variety of products. In the past, Njombe has been using a traditional costing system in which the predetermined overhead rate was 150% of direct labor cost. Selling prices had been set by multiplying total product cost by 200%. Sensing that this system was distorting costs and selling prices, Njombe has decided to switch to an activity-based costing system for manufacturing overhead costs that uses the three activity cost pools listed below. Selling prices are still to be set at 200% of unit product cost under the new system. Information on these cost pools for next year are as follows:

Activity Cost Pool	Activity Measure	Estimated Activity	Estimated Overhead Cost
Machine Setups	Number of setups	400	\$ 150,000
Quality Control	Number of inspections	1,500	\$ 180,000
Other Overhead	Machine hours	30,000	\$ 480,000

Information (on a per unit basis) related to three popular products at Njombe are as follows:

	Model #19	Model #36	Model #58
Direct material cost	\$ 400	\$ 540	\$ 310
Direct labor cost	\$ 810	\$ 600	\$ 220
Number of setups	2	3	1
Number of inspections	1	3	1
Number of machine hours	4	8	10

In comparing the traditional system with the activity-based costing system, which of Njombe's Models had higher unit product costs under the traditional system?

- A) #19
- B) #58
- C) #19 and #58
- D) #36 and #58

14) Look Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, N06D and M09K, about which it has provided the following data:

	N06D	M09K
Direct materials per unit	\$ 17.70	\$ 62.50
Direct labor per unit	\$ 5.00	\$ 16.00
Direct labor-hours per unit	0.50	1.60
Annual production (units)	40,000	15,000

The company's estimated total manufacturing overhead for the year is \$2,532,200 and the company's estimated total direct labor-hours for the year is 44,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Supporting direct labor (DLHs)	\$ 880,000
Setting up machines (setups)	376,200
Parts administration (part types)	1,276,000
Total	<u>\$ 2,532,200</u>

	Expected Activity		
	N06D	M09K	Total
DLHs	20,000	24,000	44,000
Setups	1,408	1,100	2,508
Part types	1,540	1,012	2,552

The manufacturing overhead that would be applied to a unit of product N06D under the company's traditional costing system is closest to:

- A) \$28.78
- B) \$10.00
- C) \$63.31
- D) \$34.53

15) Look Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, N06D and M09K, about which it has provided the following data:

	N06D	M09K
Direct materials per unit	\$ 17.70	\$ 62.50
Direct labor per unit	\$ 5.00	\$ 16.00
Direct labor-hours per unit	0.50	1.60
Annual production (units)	40,000	15,000

The company's estimated total manufacturing overhead for the year is \$2,532,200 and the company's estimated total direct labor-hours for the year is 44,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Supporting direct labor (DLHs)	\$ 880,000
Setting up machines (setups)	376,200
Parts administration (part types)	1,276,000
Total	<u>\$ 2,532,200</u>

	Expected Activity		
	N06D	M09K	Total
DLHs	20,000	24,000	44,000
Setups	1,408	1,100	2,508
Part types	1,540	1,012	2,552

The manufacturing overhead that would be applied to a unit of product M09K under the activity-based costing system is closest to:

- A) \$76.73
- B) \$92.08
- C) \$11.00
- D) \$168.81

16) Bullie Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, D31X and U75X, about which it has provided the following data:

	D31X	U75X
Direct materials per unit	\$ 29.20	\$ 47.40
Direct labor per unit	\$ 1.10	\$ 23.10
Direct labor-hours per unit	0.10	2.10
Annual production (units)	35,000	15,000

The company's estimated total manufacturing overhead for the year is \$1,147,650 and the company's estimated total direct labor-hours for the year is 35,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Assembling products (DLHs)	\$ 140,000
Preparing batches (batches)	241,150
Axial milling (MHs)	766,500
Total	<u>\$ 1,147,650</u>

	D31X	U75X	Total
Assembling products	3,500	31,500	35,000
Preparing batches	560	1,295	1,855
Axial milling	1,540	1,015	2,555

Required:

- Determine the manufacturing overhead cost per unit of each of the company's two products under the traditional costing system.
- Determine the manufacturing overhead cost per unit of each of the company's two products under activity-based costing system.

17) Torri Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, B40W and C63J, about which it has provided the following data:

	B40W	C63J
Direct materials per unit	\$ 34.90	\$ 63.70
Direct labor per unit	\$ 20.80	\$ 62.40
Direct labor-hours per unit	0.80	2.40
Annual production (units)	35,000	15,000

The company's estimated total manufacturing overhead for the year is \$2,656,000 and the company's estimated total direct labor-hours for the year is 64,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Assembling products (DLHs)	\$ 1,216,000
Preparing batches (batches)	480,000
Milling (MHs)	960,000
Total	<u>\$ 2,656,000</u>

Activities	B40W	C63J	Total
Assembling products	28,000	36,000	64,000
Preparing batches	2,304	2,496	4,800
Milling	1,088	2,112	3,200

Required:

- Determine the unit product cost of each of the company's two products under the traditional costing system.
- Determine the unit product cost of each of the company's two products under activity-based costing system.

18) Cabigas Corporation manufactures two products, Product C and Product D. The company estimated it would incur \$167,140 in manufacturing overhead costs during the current period. Overhead currently is applied to the products on the basis of direct labor-hours. Data concerning the current period's operations appear below:

	Product C	Product D
Estimated volume	2,000 units	2,700 units
Direct labor per unit	2.00 hours	0.80 hour
Direct labor-hours per unit	\$ 21.50	\$ 24.10
Annual production (units)	\$ 24.00	\$ 9.60

Required:

- Compute the predetermined overhead rate under the current method, and determine the unit product cost of each product for the current year.
- The company is considering using an activity-based costing system to compute unit product costs for external financial reports instead of its traditional system based on direct labor-hours. The activity-based costing system would use three activity cost pools. Data relating to these activities for the current period are given below:

Activity Cost Pool	Estimated Overhead Costs	Expected Activity		
		Product C	Product D	Total
Machine setups	\$ 13,630	130	190	290
Purchase orders	85,750	750	1,000	1,750
General Factory	67,760	4,000	2,160	6,160
Total	<u>\$ 167,140</u>			

Determine the unit product cost of each product for the current period using the activity-based costing approach. General factory overhead is allocated based on direct labor-hours.

19) Welk Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, H16Z and P25P, about which it has provided the following data:

	H16Z	P25P
Direct materials per unit	\$ 10.20	\$ 50.50
Direct labor per unit	\$ 8.40	\$ 25.20
Direct labor-hours per unit	0.40	1.20
Annual production (units)	30,000	10,000

The company's estimated total manufacturing overhead for the year is \$1,464,480 and the company's estimated total direct labor-hours for the year is 24,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost		
Supporting direct labor (DLHs)		\$	552,000
Setting up machines (setups)			132,480
Parts administration (part types)			780,000
Total		\$	<u>1,464,480</u>

	H16Z	P25P	Total
Supporting direct labor	12,000	12,000	24,000
Setting up machines	864	240	1,104
Parts administration	600	960	1,560

Required:

- Determine the manufacturing overhead cost per unit of each of the company's two products under the traditional costing system.
- Determine the manufacturing overhead cost per unit of each of the company's two products under activity-based costing system.

20) Werger Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, W82R and L48S, about which it has provided the following data:

	W82R	L48S
Direct materials per unit	\$ 11.50	\$ 62.90
Direct labor per unit	\$ 2.00	\$ 13.00
Direct labor-hours per unit	0.20	1.30
Annual production (units)	45,000	10,000

The company's estimated total manufacturing overhead for the year is \$1,521,960 and the company's estimated total direct labor-hours for the year is 22,000.

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures	Estimated Overhead Cost
Supporting direct labor (DLHs)	\$ 352,000
Setting up machines (setups)	201,960
Parts administration (part types)	968,000
Total	<u>\$ 1,521,960</u>

Activities	W82R	L48S	Total
Supporting direct labor	9,000	13,000	22,000
Setting up machines	814	374	1,188
Parts administration	924	1,012	1,936

Required:

- Determine the unit product cost of each of the company's two products under the traditional costing system.
- Determine the unit product cost of each of the company's two products under activity-based costing system.

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Appendix 2B The Predetermined Overhead Rate and Capacity

1) When the fixed costs of capacity are spread over the estimated activity of the period rather than the level of activity at capacity, the units that are produced must shoulder the costs of unused capacity.

2) When the predetermined overhead rate is based on the level of activity at capacity, an item called the Cost of Unused Capacity may appear to be treated as a period expense on income statements prepared for internal management use.

3) If the predetermined overhead rate is based on the estimated level of activity for the current period, then products will be charged only for the capacity that they use and will not be charged for the capacity they don't use.

4) Risser Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 14,256
Capacity of the jointer	240 hours
Actual results:	
Sales	\$ 62,310
Direct materials	\$ 14,100
Direct labor	\$ 16,000
Actual total fixed manufacturing overhead	\$ 14,256
Selling and administrative expense	\$ 8,900
Actual hours of jointer use	220 hours

The gross margin that would be reported on the income statement prepared for internal management purposes would be closest to:

- A) \$10,242
- B) \$19,142
- C) \$17,954
- D) \$62,310

5) The management of Garn Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated activity for the coming year. The Corporation's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated activity for the upcoming year is 69,000 machine-hours. Capacity is 85,000 machine-hours. All of the manufacturing overhead is fixed and is \$4,105,500 per year within the range of 69,000 to 85,000 machine-hours. If the Corporation bases its predetermined overhead rate on capacity but the actual level of activity for the year turns out to be 69,700 machine-hours, the cost of unused capacity shown on the income statement prepared for internal management purposes would be closest to:

- A) \$772,800
- B) \$780,640
- C) \$738,990
- D) \$41,650

6) The management of Krach Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 10,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 9,500 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$12,000 per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?

- A) \$2,000
- B) \$2,500
- C) \$1,900
- D) \$600

7) The management of Winterroth Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The Corporation's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours.

	Estimated at the Beginning of the Year	Capacity	Actual
Machine-hours	53,000	63,000	49,000
Manufacturing overhead	\$ 1,803,060	\$ 1,803,060	\$ 1,803,060

If the Corporation bases its predetermined overhead rate on capacity, then as shown on the income statement prepared for internal management purposes, the cost of unused capacity would be closest to:

- A) \$286,200
- B) \$400,680
- C) \$264,600
- D) \$136,080

8) Dowty Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated lathe. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 19,964
Capacity of the lathe	280 hours
Actual results:	
Actual total fixed manufacturing overhead	\$ 19,964
Actual hours of lathe use	230 hours

The manufacturing overhead applied is closest to:

- A) \$19,964
- B) \$16,399
- C) \$7,639
- D) \$9,300

9) Rapier Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 3,740
Capacity of the jointer	200 hours

Actual results:

Actual total fixed manufacturing overhead	\$ 3,740
Actual hours of jointer use	170 hours

The predetermined overhead rate based on hours at capacity is closest to:

- A) \$58.24 per hour
- B) \$49.50 per hour
- C) \$22.00 per hour
- D) \$18.70 per hour

10) Traeger Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated bandsaw. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 26,936
Capacity of the bandsaw	280 hours

Actual results:

Actual total fixed manufacturing overhead	\$ 26,936
Actual hours of bandsaw use	260 hours

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:

- A) \$1,924
- B) \$18,136
- C) \$0
- D) \$18,765

11) Mausser Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 11,648
Capacity of the jointer	280 hours

Actual results:

Sales	\$ 52,760
Direct materials	\$ 13,300
Direct labor	\$ 16,000
Actual total fixed manufacturing overhead	\$ 11,648
Selling and administrative expense	\$ 9,300
Actual hours of jointer use	260 hours

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:

- A) \$0
- B) \$2,348
- C) \$832
- D) \$3,012

12) Mausser Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 11,648
Capacity of the jointer	280 hours

Actual results:

Sales	\$ 52,760
Direct materials	\$ 13,300
Direct labor	\$ 16,000
Actual total fixed manufacturing overhead	\$ 11,648
Selling and administrative expense	\$ 9,300
Actual hours of jointer use	260 hours

The gross margin that would be reported on the income statement prepared for internal management purposes would be closest to:

- A) \$52,760
- B) \$3,344
- C) \$12,644
- D) \$11,812

13) Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 33,075
Capacity of the shaper	270 hours

Actual results:

Sales	\$ 79,268
Direct materials	\$ 12,200
Direct labor	\$ 17,400
Actual total fixed manufacturing overhead	\$ 33,075
Selling and administrative expense	\$ 8,100
Actual hours of shaper use	250 hours

The predetermined overhead rate based on hours at capacity is closest to:

- A) \$30.00 per hour
- B) \$122.50 per hour
- C) \$32.40 per hour
- D) \$132.30 per hour

14) Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 33,075
Capacity of the shaper	270 hours

Actual results:

Sales	\$ 79,268
Direct materials	\$ 12,200
Direct labor	\$ 17,400
Actual total fixed manufacturing overhead	\$ 33,075
Selling and administrative expense	\$ 8,100
Actual hours of shaper use	250 hours

The manufacturing overhead applied is closest to:

- A) \$7,500
- B) \$33,075
- C) \$8,100
- D) \$30,625

15) Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 33,075
Capacity of the shaper	270 hours

Actual results:

Sales	\$ 79,268
Direct materials	\$ 12,200
Direct labor	\$ 17,400
Actual total fixed manufacturing overhead	\$ 33,075
Selling and administrative expense	\$ 8,100
Actual hours of shaper use	250 hours

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:

- A) \$2,450
- B) \$0
- C) \$24,975
- D) \$25,575

16) Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 33,075
Capacity of the shaper	270 hours

Actual results:

Sales	\$ 79,268
Direct materials	\$ 12,200
Direct labor	\$ 17,400
Actual total fixed manufacturing overhead	\$ 33,075
Selling and administrative expense	\$ 8,100
Actual hours of shaper use	250 hours

The gross margin that would be reported on the income statement prepared for internal management purposes would be closest to:

- A) \$19,043
- B) \$16,593
- C) \$10,943
- D) \$79,268

17) Dunnings Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated router. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 10,998
Capacity of the router	180 hours

Actual results:

Actual total fixed manufacturing overhead	\$ 10,998
Actual hours of router use	130 hours

The predetermined overhead rate based on hours at capacity is closest to:

- A) \$84.60 per hour
- B) \$61.10 per hour
- C) \$61.54 per hour
- D) \$44.44 per hour

18) Dunnings Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated router. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 10,998
Capacity of the router	180 hours

Actual results:

Actual total fixed manufacturing overhead	\$ 10,998
Actual hours of router use	130 hours

The manufacturing overhead applied is closest to:

- A) \$7,943
- B) \$8,000
- C) \$5,778
- D) \$10,998

19) The management of Bullinger Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 9,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 7,700 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$11,880 per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on the estimated amount of the allocation base for the upcoming year, then the predetermined overhead rate is closest to:

- A) \$1.32 per machine-hour
- B) \$1.49 per machine-hour
- C) \$0.99 per machine-hour
- D) \$1.54 per machine-hour

20) The management of Bullinger Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 9,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 7,700 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$11,880 per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:

- A) \$1.54 per machine-hour
- B) \$1.32 per machine-hour
- C) \$1.49 per machine-hour
- D) \$0.99 per machine-hour

21) The management of Bullinger Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 9,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 7,700 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$11,880 per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?

- A) \$2,970
- B) \$2,541
- C) \$1,716
- D) \$4,257

22) Zackery Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated lathe. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 7,452
Capacity of the lathe	230 hours
Actual results:	
Actual total fixed manufacturing overhead	\$ 7,452
Actual hours of lathe use	180 hours

The manufacturing overhead applied is closest to:

- A) \$9,900
- B) \$5,832
- C) \$7,748
- D) \$7,452

23) Zackery Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated lathe. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead	\$ 7,452
Capacity of the lathe	230 hours

Actual results:

Actual total fixed manufacturing overhead	\$ 7,452
Actual hours of lathe use	180 hours

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:

- A) \$2,448
- B) \$296
- C) \$0
- D) \$1,620

24) The management of Holdaway Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 79,000 machine-hours. Capacity is 88,000 machine-hours and the actual level of activity for the year is assumed to be 74,900 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$5,700,640 per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:

- A) \$72.16 per machine-hour
- B) \$70.38 per machine-hour
- C) \$76.11 per machine-hour
- D) \$64.78 per machine-hour

25) The management of Holdaway Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 79,000 machine-hours. Capacity is 88,000 machine-hours and the actual level of activity for the year is assumed to be 74,900 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$5,700,640 per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?

- A) \$295,856
- B) \$848,618
- C) \$583,020
- D) \$552,762

26) The management of Featheringham Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 62,000 machine-hours. Capacity is 75,000 machine-hours and the actual level of activity for the year is assumed to be 59,000 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$2,836,500 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Z77W which required 410 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:

- A) \$48.08 per machine-hour
- B) \$37.82 per machine-hour
- C) \$48.91 per machine-hour
- D) \$45.75 per machine-hour

27) The management of Featheringham Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 62,000 machine-hours. Capacity is 75,000 machine-hours and the actual level of activity for the year is assumed to be 59,000 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$2,836,500 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Z77W which required 410 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the amount of manufacturing overhead charged to job Z77W is closest to:

- A) \$15,506.20
- B) \$19,065.00
- C) \$20,051.12
- D) \$19,711.27

28) The management of Featheringham Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 62,000 machine-hours. Capacity is 75,000 machine-hours and the actual level of activity for the year is assumed to be 59,000 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$2,836,500 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Z77W which required 410 machine-hours.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?

- A) \$137,250
- B) \$605,120
- C) \$491,660
- D) \$467,870

29) The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$4,130,340 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on the estimated amount of the allocation base for the upcoming year, then the predetermined overhead rate is closest to:

- A) \$57.05 per machine-hour
- B) \$60.83 per machine-hour
- C) \$59.86 per machine-hour
- D) \$50.37 per machine-hour

30) The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$4,130,340 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on the estimated amount of the allocation base for the upcoming year, then the amount of manufacturing overhead charged to Job Q20L is closest to:

- A) \$23,673.90
- B) \$26,812.98
- C) \$28,589.98
- D) \$28,134.20

31) The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$4,130,340 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:

- A) \$57.05 per machine-hour
- B) \$59.86 per machine-hour
- C) \$50.37 per machine-hour
- D) \$60.83 per machine-hour

32) The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$4,130,340 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the amount of manufacturing overhead charged to Job Q20L is closest to:

- A) \$28,589.98
- B) \$26,592.60
- C) \$26,812.98
- D) \$23,673.90

33) The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be \$4,130,340 per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?

- A) \$654,810
- B) \$687,076
- C) \$547,669
- D) \$483,552

34) The management of Kotek Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 8,000 machine-hours. In addition, capacity is 10,000 machine-hours and the actual activity for the year is 8,700 machine-hours. All of the manufacturing overhead is fixed and is \$6,400 per year. Job L77S, which required 220 machine-hours, is one of the jobs worked on during the year.

Required:

- a. Determine the predetermined overhead rate if the predetermined overhead rate is based on activity at capacity.
- b. Determine how much overhead would be applied to Job L77S if the predetermined overhead rate is based on activity at capacity.
- c. Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

35) The management of Schneider Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 42,000 machine-hours. In addition, capacity is 46,000 machine-hours and the actual activity for the year is 43,000 machine-hours. All of the manufacturing overhead is fixed and is \$734,160 per year.

Required:

- a. Determine the predetermined overhead rate if the predetermined overhead rate is based on activity at capacity.
- b. Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

36) The management of Bouyer Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 34,000 machine-hours. In addition, capacity is 37,000 machine-hours and the actual activity for the year is 34,700 machine-hours. All of the manufacturing overhead is fixed and is \$377,400 per year.

Required:

Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

37) The management of Buelow Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work.

Estimated activity for the upcoming year	76,000 machine-hours
Capacity	94,000 machine-hours
Actual activity for the year	82,800 machine-hours
Manufacturing overhead (all fixed)	\$ 5,572,320 per year

Job Q58A, which required 130 machine-hours, is one of the jobs worked on during the year.

Required:

- Determine the predetermined overhead rate if the predetermined overhead rate is based on the estimated activity for the upcoming year.
- Determine how much overhead would be applied to Job Q58A if the predetermined overhead rate is based on estimated activity for the upcoming year.
- Determine the predetermined overhead rate if the predetermined overhead rate is based on the activity at capacity.
- Determine how much overhead would be applied to Job Q58A if the predetermined overhead rate is based on activity at capacity.
- Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

38) The management of Wrights Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work.

Estimated activity for the upcoming year	15,000 machine-hours
Capacity	18,000 machine-hours
Actual activity for the year	15,800 machine-hours
Manufacturing overhead (all fixed)	\$ 43,200 per year

Required:

- Determine the predetermined overhead rate if the predetermined overhead rate is based on the estimated activity for the upcoming year.
- Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.