## Chapter 02 Using Financial Statements and Budgets

## TRUEFALSE

1. A balance sheet shows your financial condition as of the time the statement is prepared
(A) True
(B) False

Answer : (A)
2. A budget is a financial report that forecasts your current income as a percentage of your past earnings
(A) True
(B) False

Answer : (B)
3. An income and expense statement provides a measure of financial performance over a period of time.
(A) True
(B) False

Answer : (A)
4. Financial planning is necessary only if you earn a lot of money.
(A) True
(B) False

Answer : (B)
5. Preparation of an income and expense statement is the first step in the personal financial planning process
(A) True
(B) False

Answer: (B)
6. Knowing how to prepare and interpret personal financial statements is the cornerstone of
personal financial planning
(A) True
(B) False

Answer: (A)
7. Financial plans provide direction to annual budgets.
(A) True
(B) False

Answer : (A)
8. If you obtain a loan to purchase a car in June, this loan amount will be included as income for the month of June.
(A) True
(B) False

Answer : (B)
9. Your auto loan payments are listed as an expense on the income and expense statement
(A) True
(B) False

Answer: (A)
10. If you list your gross salary in the income portion of the budget, the expenditures section will include income taxes and social security.
(A) True
(B) False

Answer : (A)
11. Net income (after taxes) should be used when preparing an income and expense statement.
(A) True
(B) False

Answer : (B)
12. Balance sheets and income statements are most useful if prepared at least annually
(A) True
(B) False

Answer: (A)
13. It is recommended that you maintain a ledger to record both assets and liabilities.
(A) True
(B) False

Answer : (B)
14. An individual should prepare his or her personal financial statements once in five years.
(A) True
(B) False

Answer : (B)
15. An individual can maintain his or her personal financial statements using spreadsheet software.
(A) True
(B) False

Answer : (A)
16. An inability to reach short-term goals will significantly affect your ability to reach long-term goals.
(A) True
(B) False

Answer : (A)
17. You have a balanced budget when your total income for the year equals or exceeds your total expenditure for the year.
(A) True
(B) False

Answer : (A)
18. The best way to balance your budget is to increase borrowing.
(A) True
(B) False

Answer: (B)
19. Budgeting and record keeping are really the same activity.
(A) True
(B) False

Answer : (B)
20. Estimating expenses using actual expenses from previous years and tracking current expenses make the task of preparing a cash budget easier.
(A) True
(B) False

Answer : (A)
21. A cash budget has value only if you use it, review it regularly, and keep careful records of income and expenses
(A) True
(B) False

Answer : (A)
22. In a budget, "fun money" is for family members to spend as they like without having to account for how it is spent
(A) True
(B) False

Answer: (A)
23. Future value calculations to estimate the funds needed to meet a goal take compounding into account.
(A) True
(B) False

## MULTICHOICE

24. The balance sheet describes a family's financial position:
(A) at a certain point in time.
(B) as an annual summary.
(C) as at a time period less than one year.
(D) at a future time.
(E) once in ten years.

Answer : (A)
25. A budget is a:
(A) plan that calculates the interest on a loan.
(B) schedule of personal investments.
(C) list of prepaid expenses.
(D) detailed financial forecast.
(E) set of personal financial objectives.

Answer: (D)
26. EasyThe main purpose of a budget is to help in:
(A) developing financial goals
(B) calculating discounted cash flow.
(C) giving feedback about the performance of the plan.
(D) monitoring and controlling financial outcomes.
(E) revising depreciation schedules.

Answer: (D)
27. Budgets are:
(A) restrictive.
(B) complicated.
(C) forward looking.
(D) permanent
(E) unnecessary.

Answer: (C)
28. Which of the following is the most common budgeting period?
(A) Weekly
(B) Monthly
(C) Quarterly
(D) Semi-annually.
(E) Bi-weekly.

Answer: (B)
29. The three parts of your balance sheet are your:
(A) income, liabilities, and net worth
(B) assets, expenditures, and net worth.
(C) assets, liabilities, and expenses.
(D) assets, liabilities, and net worth.
(E) income, liabilities, and assets.

Answer: (D)
30. A(n) $\qquad$ is listed as an asset on your balance sheet
(A) bank credit card balance
(B) education loan
(C) outstanding medical bill
(D) checking account
(E) leased automobile

Answer: (D)
31. When Phil lists his house on his balance sheet, he should record its:
(A) actual purchase price.
(B) replacement value.
(C) insured value.
(D) deferred price.
(E) fair market value.

Answer: (E)
32. Your $\qquad$ is an example of a liquid asset.
(A) home
(B) car
(C) checking account
(D) charge account
(E) life insurance proceeds

Answer : (C)
33. Sam and his wife Ann purchased a home in Lubbock, Texas in 1980 for $\$ 100,000$. Their original home mortgage was for $\$ 90,000$. The house has a current market value of $\$ 175,000$ and a replacement value of $\$ 200,000$. They still owe $\$ 55,000$ on their home mortgage. Sam and Ann are now constructing their balance sheet. How should their home be reflected on their current personal balance sheet?
(A) \$200,000 asset and \$55,000 liability
(B) \$200,000 asset and \$90,000 liability
(C) \$175,000 asset and \$55,000 liability
(D) $\$ 175,000$ asset and $\$ 90,000$ liability
(E) $\$ 100,000$ asset and $\$ 55,000$ liability

Answer: (C)
34. $\qquad$ is an example of a personal asset.
(A) Jewelry
(B) A mutual fund
(C) A corporate bond
(D) Charge account balance
(E) Premium on auto insurance

Answer : (A)
35. $\qquad$ is listed as a liability on your balance sheet.
(A) A money market deposit account
(B) A checking account
(C) Equipment
(D) Cash value of life insurance
(E) Rent due

Answer: (D)
36. Balance sheet liabilities should be recorded at their:
(A) original outstanding balance.
(B) year-end outstanding balance.
(C) average outstanding balance.
(D) current outstanding balance.
(E) beginning outstanding balance.

Answer: (D)
37. Which of the following portions of the mortgage loan is recorded as a liability in the balance sheet?
(A) Interest only
(B) Sum of the interest paid and the outstanding balance
(C) Sum of the interest due and the outstanding balance
(D) Principal portion only
(E) Principal portion and interest paid

Answer: (D)
38. Sonny and Cher have a net worth of $\$ 35,000$ and total assets of $\$ 200,000$. If their revolving credit and unpaid bills total $\$ 2,200$, what will their long-term liabilities be?
(A) $\$ 115,000$
(B) $\$ 140,000$
(C) $\$ 142,200$
(D) $\$ 162,800$
(E) $\$ 165,000$

Answer : (D)
39. You are solvent if your:
(A) total liabilities exceed total assets.
(B) total assets exceed total liabilities
(C) total assets exceed equity.
(D) total liabilities exceed equity.
(E) current liabilities exceed current assets.

Answer : (B)
40. If your $\qquad$ , your net worth on the balance sheet will increase from one period to the next.
(A) liabilities increase and assets remain constant
(B) liabilities increase and assets decrease
(C) assets increase and liabilities remain constant or decrease
(D) income decreases
(E) expenses increase

Answer: (C)
41. The income and expense statement examines your financial:
(A) level.
(B) performance.
(C) position
(D) assets
(E) objectives.

Answer : (B)
42. An income statement includes:
(A) income, liabilities, and net worth.
(B) income, expenditure, and cash surplus or deficit
(C) expenditures, net worth, and cash surplus or deficit.
(D) net worth, surplus, and income or expenses.
(E) savings, surplus, and income or expenses.

Answer : (B)
43. You would record $\qquad$ on an income and expense statement.
(A) the value of your stock portfolio
(B) real estate
(C) bonds
(D) cash on hand
(E) charitable payments

Answer : (E)
44. I should record $\qquad$ on an income and expense statement for the period of January 1 to June 30.
(A) an $\$ 800$ refrigerator bought on credit on May 30
(B) an education loan account remainder
(C) jewelry purchased with an arrangement to pay later
(D) my checking account balance
(E) groceries bought and paid for in Jun

Answer: (E)
45. When there is a cash surplus on your income and expense statement, your:
(A) net worth will be equal to zero
(B) total expense will be more than your total income .
(C) payments on debts will not be met.
(D) investment balance will be increased
(E) income and expense will be equal

Answer: (D)
46. increased your assetsIf your statement of income and expense shows a deficit, you may have:
(A) increased your debts
(B) increased your assets
(C) increased your savings.
(D) taken a cash loan on your insurance.
(E) sold some securities.

Answer : (A)
47. When estimating income for the income and expense statement, you should:
(A) use gross income
(B) include expected pay increases
(C) adjust for inflation.
(D) use net income less capitalized interest
(E) use the income received and earned.

Answer : (A)
48. If your liquid assets equal $\$ 50,000$ and your current debts equal $\$ 15,000$, your liquidity ratio is:
(A) $30 \%$
(B) $70 \%$
(C) $143 \%$
(D) $233 \%$
(E) $333 \%$.

Answer : (E)
49. If your total assets equal $\$ 87,000$ and your total liabilities equal $\$ 10,000$, your solvency ratio is:
(A) $11.5 \%$.
(B) $13.0 \%$.
(C) $77.0 \%$.
(D) $87.0 \%$.
(E) $88.5 \%$.

Answer : (E)
50. The $\qquad$ ratio indicates your ability to meet current debt payments.
(A) solvency
(B) liquidity
(C) cash
(D) savings
(E) debt service

Answer: (B)
51. The savings ratio calculated from an income and expense statement represents the:
(A) percentage of gross income saved.
(B) ability to cover immediate debt when there is an interruption in income.
(C) percentage of after-tax income saved.
(D) percentage of tax-deferred income earned annually
(E) percentage of asset value salvaged.

Answer: (C)
52. Assume that your total income for the current year is $\$ 35,000$. Your total expenses including taxes of $\$ 5,000$ is $\$ 30,000$. Your savings ratio is
(A) $7.5 \%$.
(B) $10.0 \%$.
(C) $12.5 \%$.
(D) $13.3 \%$.
(E) $16.7 \%$.

Answer : (E)
53. Jacques's total monthly loan payments amount to $\$ 1,020$, while her gross income is $\$ 3,000$ per month. What is her debt service ratio?
(A) $34 \%$
(B) $43 \%$
(C) $50 \%$
(D) $75 \%$
(E) $82 \%$

Answer : (A)
54. Mike and Teresa Garza have a monthly gross income of $\$ 5,000$. They pay $\$ 1,000$ per month in taxes and $\$ 2,000$ per month toward various loans. What is their debt service ratio?
(A) $20 \%$
(B) $30 \%$
(C) $40 \%$
(D) $50 \%$
(E) $60 \%$

Answer: (C)
55. Which of the following is a stage in preparing a cash budget?
(A) Calculating financial ratios
(B) Estimating expenses
(C) Calculating depreciation expenses
(D) Finalizing the balance sheet
(E) Preparing the bank reconciliation report

Answer: (B)
56. A cash budget helps you:
(A) monitor and control your finances
(B) analyze your financial position
(C) calculate your fixed assets ratio.
(D) calculate your investment turnover ratio.
(E) analyze the use of debt in a capital structure.

Answer: (A)
57. The Wilson family's short-term goals might include:
(A) setting up an emergency fund of three months' income
(B) buying a house
(C) sending the kids to college.
(D) planning to retire at the age of 60 .
(E) going on a world cruise

Answer : (A)
58. There is a need for budget adjustments when:
(A) income is stable
(B) account deficits and surpluses balance out.
(C) account deficits are more than surpluses.
(D) a new calendar year begins
(E) short-term financial goals are achieved

Answer : (C)
59. The best approach to solve the problem of an annual budget deficit is to:
(A) liquidate more assets than the budget shortfall for the year.
(B) reduce high-priority expenses on the budget.
(C) reduce flexible expenditures
(D) reduce fixed expenses.
(E) reduce high-priority expenses on the budget.

Answer : (C)
60. What can you do if your budget shows an annual budget deficit?
(A) Liquidate enough savings and investments to meet the total budget shortfall for the year.
(B) Increase low-priority expenses in the budget.
(C) Decrease income.
(D) Discourage borrowings
(E) Shift expenses from the surplus months to the deficit months.

Answer : (A)
61. Your investment advisor wants you to purchase an annuity that will pay you $\$ 25,000$ per year for 10 years. If you require a $7 \%$ return, what is the most you should pay for this investment?
(A) $\$ 49,179$
(B) $\$ 175,590$
(C) $\$ 201,000$
(D) $\$ 225,682$
(E) $\$ 250,000$

Answer : (B)
62. Theresa invested $\$ 5,000$ in an account she expects will earn $7 \%$ annually. Approximately how many years will it take for the account to double in value? (Round the number of years to the nearest whole number.)
(A) 8
(B) 9
(C) 10
(D) 11
(E) 12

Answer : (C)
63. Jamil invested $\$ 9,500$ in an account he expects will earn $5 \%$ annually. Approximately how many years will it take for the account to double in value?
(A) 8.8
(B) 9.7
(C) 10.8
(D) 11.4
(E) 14.4

Answer : (E)
64. Phil has $\$ 2,000$, and he needs it to grow to $\$ 4,000$ in 8 years. Assuming he does not add any more money to this fund, what rate of interest would he need to earn? Approximate the rate of interest to the nearest whole number
(A) $6 \%$
(B) $7 \%$
(C) $8 \%$
(D) $9 \%$
(E) $10 \%$

Answer: (D)
65. Michael and Sandy purchased a home for $\$ 100,000$ five years ago. If its value appreciated at $6 \%$ annually, what is it worth today?
(A) $\$ 100,000$
(B) $\$ 106,000$
(C) $\$ 130,000$
(D) $\$ 133,823$
(E) $\$ 135,603$

Answer: (D)
66. Elena purchased a stamp collection for $\$ 5,000$ thirty years ago. If its value is appreciated at $8 \%$ annually, what is it worth today?
(A) $\$ 17,000$
(B) $\$ 36,400$
(C) $\$ 50,313$
(D) $\$ 123,023$
(E) $\$ 150,000$

Answer : (C)

## SHORTANSWER

67. A balance sheet provides a statement of your financial $\qquad$ .A. position
B. performance
C. goals
D. ratios

Answer : position
68. The first step in financial planning is to $\qquad$ .A. define your financial goals
B. set up a budget
C. find out your liquidity ratio
D. prepare a trend analysis

Answer : define your financial goals
69. A detailed forecast used to monitor and control expenses is called a(n) $\qquad$ .A. balance sheet
B. profit and loss account
C. budget
D. income and expense statement

Answer : budget
70. A $\qquad$ is an example of a liquid asset.A. fixed deposit of three years
B. savings account
C. recurring deposit of two years
D. retirement account

Answer : savings account
71. A $\qquad$ is an example of a tangible asset.A. house
B. certificate of deposit
C. copyright
D. trademark

Answer : house
72. Investment assets are required to $\qquad$ .A. be used in our everyday lives.
B. increase productivity.
C. provide a service.
D. earn a return.

Answer : earn a return
73. A(n) $\qquad$ is an example of a current liability.A. auto loan
B. credit card balance
C. mortgage
D. education loan

Answer : credit card balance
74. When your liabilities exceed your assets, you are $\qquad$ .A. solvent
B. financially sound
C. a high net worth individual
D. insolvent

Answer : insolvent
75. When your assets exceed your liabilities, you are $\qquad$ .A. insolvent
B. not meeting your financial targets
C. solvent
D. in financial distress

Answer : solven
76. Your car has a market value of $\$ 4,000$, while the balance of the loan against it is now $\$ 2,500$. Your ownership interest in the car is $\qquad$ .A. $\$ 2,500$
B. $\$ 4,000$
C. $\$ 6,500$
D. $\$ 1,500$

Answer : \$1,500
77. Payments made on your loan obligations should $\qquad$ your net worth.A. increase
B. decrease
C. maintain
D. eliminate

Answer : maintain
78. The total amount of salary you earn before taxes are deducted is called your $\qquad$ .A. gross pay
B. after-tax salary
C. take-home salary
D. net pay

Answer: gross pay
79. You bought a $\$ 500$ stereo on an installment plan and made two payments of $\$ 75$ each during the year. On your income and expense statement for the year, you will show an expense of $\qquad$ .A. \$150
B. $\$ 575$
C. $\$ 650$
D. $\$ 500$

Answer : \$150
80. $\qquad$ are difficult to estimate for an upcoming year.A. Interest payments
B. Medical expenses
C. Rent payments
D. Insurance expenses

Answer : Medical expenses
81. Total assets on your balance sheet are $\$ 6,000$ and liabilities are $\$ 2,000$. Your solvency ratio will be $\qquad$ .A. $30 \%$
B. $33 \%$
C. $67 \%$
D.65\%

Answer : 67\%
82. The liquidity ratio is designed to show the percentage of $\qquad$ you can cover with your current assets.A. annual credit obligations
B. future months' credit obligations
C. long-term credit obligations
D. potential credit obligations

Answer : annual credit obligations
83. If your budget shows a deficit, you would have to $\qquad$ to regain balance.A. increase your savings
B. increase your income
C. increase your expenses
D. increase your investments

Answer : increase your income
84. budget will have value only if it is actually used and $\qquad$ .A. records are kept of actual income and expenses
B. spending never deviates from the budgeted amount
C. it reflects actual financial position
D. it takes into account only credit transactions

Answer : records are kept of actual income and expenses
85. $\qquad$ is the most preferable way for one to deal with budget deficits.A. Liquidating one's savings and investments
B. Borrowing money from one's relatives
C. Cutting one's low-priority expenses
D. Increasing one's income

Answer : Cutting one's low-priority expenses
86. Once you define your $\qquad$ financial goals, you can prepare a cash budget for the upcoming year.A. semi-annual
B. short-term
C. quarterly
D. long-term

Answer : short-term
87. $\qquad$ value is the value today of an amount to be received in the future.A. Present
B. Future
C. Intrinsic
D. Extrinsic

Answer : Present
88. The process of finding present value is called $\qquad$ .A. discounting
B. calculating
C. compounding
D. computing

Answer : discounting

## ESSAY

89. Jean and Jim have liquid assets of $\$ 3,600$ and other assets of $\$ 42,800$. Their total liabilities equal $\$ 26,000$. What is their net worth? (Show all work)

## Graders Info :

Net worth $=$ Total assets - Total liabilities.Net worth $=\$ 46,400-\$ 26,000=\$ 20,400$
REJ: Please see the section "The Balance Sheet: How Much Are You Worth Today?" for more information.
90. Rosa and Jose have liquid assets of $\$ 5,000$ and other assets of $\$ 50,000$. Their total liabilities equal $\$ 26,000$. What is their net worth? (Show all work.)

## Graders Info :

Net worth $=$ Total assets - Total liabilities.Net worth $=\$ 55,000-\$ 26,000=\$ 29,000$
REJ: Please see the section "
The Balance Sheet: How Much Are You Worth Today?
" for more information
91. Construct a balance sheet using the following information. Be sure the format is correct. (Show all work.)
Cash on hand \$75
Bank credit card balance 1,200
Utility bill (overdue) 100
Auto loan balance $\quad 3,500$
Mortgage 75,000
Primary residence $\quad 105,000$
Jewelry $\quad 2,000$
Stocks $\quad 17,500$
Coin collection $\quad 2,500$
2001 Toyota 7,500

## Graders Info :

$\left.\begin{array}{lcllll}\text { Assets } & & & \begin{array}{l}\text { Liabilities } \\ \text { Current Liabilities }\end{array} \\ \begin{array}{l}\text { Liquid Assets } \\ \text { Cash on hand }\end{array} & \$ 75 & & \begin{array}{l}\text { Bank credit card } \\ \text { balance }\end{array} & \$ 1,200 & \\ \text { Total Liquid Assets } & & \$ 75 & \begin{array}{l}\text { Utility bill (overdue) } \\ \text { Total Current } \\ \text { Liabilities }\end{array} & 100 & \\ \text { Investments } & & & \text { Long-Term Liabilities }\end{array}\right)$

| Jewellery | 2,000 |  |
| :--- | :---: | :---: |
| Coin collection | 2,500 |  |
| Total Personal <br> Property <br> (I)Total Assets |  | $\$ 12,000$ |

Total Liabilities and
\$ 13,4575
Net worth
\$ 12,000
\$ 13,4575

REJ: Please see the section "The Balance Sheet: How Much Are You Worth Today?" for more information.

| Assets |  |  | Liabilities |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Liquid Assets |  |  | Current Liabilities |  |  |
| Cash on hand | \$ 75 |  | Bank credit card balance | \$ 1,200 |  |
| Total Liquid Assets |  | \$ 75 | Utility bill (overdue) | 100 |  |
|  |  |  | Total Current Liabilities |  | \$ 1,300 |
| Investments |  |  |  |  |  |
| Stocks | 17,500 |  | Long-Term Liabilities |  |  |
| Total Investments |  | \$ 17,500 | Auto loan balance | 3,500 |  |
|  |  |  | Mortgage | 75,000 |  |
| Real Property |  |  | Total Long-Term Liabilities |  | \$ 78,500 |
| Primary residence | 105,000 |  |  |  |  |
| Total Real Property |  | \$ 105,000 | (II) Total Liabilities |  | \$ 79,800 |
| Personal Property |  |  | Net worth (1) - (ll) |  | \$ 54,775 |
| Auto vehicles: 2001 | \$ 7,500 |  |  |  |  |
| Toyota |  |  |  |  |  |
| Jewellery | 2,000 |  | Total Liabilities and Net worth |  | \$ 13,4575 |
| Coin collection | 2,500 |  |  |  |  |
| Total Personal |  | \$ 12,000 |  |  |  |
| Property |  |  |  |  |  |
| (I)Total Assets |  | \$ 13,4575 |  |  |  |
| REJ: Please see the s information. | n "The B | nce Sheet: | ow Much Are You Wor | Today?" |  |

92. Construct a balance sheet using the following information. Be sure the format is correct. (Show all work.)
Cash on hand \$500
Bank credit card balance 750
Taxes due 500
Utility bills (overdue) 120
Auto loan balance $\quad 6,000$
Mortgage 45,000
Primary residence 60,000
Jewelry $\quad 1,200$
Stocks 6,000
Coin collection $\quad 2,500$

| 2001 Toyota | 7,500 |
| :--- | :--- |
| Auto payment | 250 |

## Graders Info :

| Assets |  |  | Liabilities |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Liquid Assets |  |  | Current Liabilities |  |  |
| Cash on hand | \$ 500 |  | Bank credit card balance | \$ 750 |  |
| Total Liquid Assets |  | \$ 500 | Utility bill (overdue) | 120 |  |
|  |  |  | Taxes due | 500 |  |
| Investments |  |  | Total Current |  | \$ 1,370 |
|  |  |  | Liabilities |  |  |
| Stocks | 6,000 |  |  |  |  |
| Total Investments |  | \$ 6,000 | Long-Term Liabilities |  |  |
|  |  |  | Auto loan balance | 6,000 |  |
| Real Property |  |  | Mortgage | 45,000 |  |
| Primary residence | 60,000 |  | Total Long-Term |  | \$ 51,000 |
|  |  |  | Liabilities |  |  |
| Total Real Property |  | \$ 60,000 |  |  |  |
|  |  |  | (II) Total Liabilities |  | \$ 52,370 |
| Personal Property |  |  |  |  |  |
| 2001 Toyota | \$ 7,500 |  | Net worth (1) - (ll) |  | \$ 25,330 |
| Jewellery | 1,200 |  |  |  |  |
| Coin collection | 2,500 |  | Total Liabilities and |  | \$ 77,700 |
|  |  |  | Net worth |  |  |
| Total Personal |  | \$ 11,200 |  |  |  |
| Property |  |  |  |  |  |
| (I)Total Assets |  | \$ 77,700 |  |  |  |

REJ: Please see the section "The Balance Sheet: How Much Are You Worth Today?" for more information
93. The Harts spend $30 \%$ of their disposable income on housing, $5 \%$ on medical expenses, $25 \%$ on food, $10 \%$ on clothing, $14 \%$ on loan repayments, and $8 \%$ on entertainment. How much of their disposable income is available for savings and investment? (Show all work.)

## Graders Info :

The disposable income is $100 \%$. The total outlays equal $92 \%$, which is calculated as $30 \%+5 \%+$ $25 \%+10 \%+14 \%+8 \%$. Therefore, the total disposable income available for savings and investment $=100 \%-92 \%=8 \%$. REJ: Please see the section "The Income and Expense Statement: What We Earn and Where It Goes" for more information.
94. Inflation is expected to be $4 \%$ in the coming year. If Mr. Gonza earned $\$ 37,000$ this year, how much must he earn the following year to keep up with inflation and maintain a balance between his
income and his increasing expenditures? (Show all work.)

## Graders Info :

To keep up with an inflation of $4 \%$ in the coming year, Mr. Gonza must earn $\$ 38,480$. This is calculated as $\$ 37,000+(4 \%$ of $\$ 37,000)$. Alternatively, this can also be calculated as $\$ 37,000 \times 1.04$ $=\$ 38,480$. REJ: Please see the section "Cash In and Cash Out: Preparing and Using Budgets" for more information.
95. Inflation is expected to be $3 \%$ in the coming year. If Mr. Gonza earned $\$ 45,000$ this year, how much must he earn the following year to keep up with inflation and maintain a balance between his income and his increasing expenditures? (Show all work.)

## Graders Info :

To keep up with an inflation of $3 \%$ in the coming year, Mr. Gonza must earn $\$ 46,350$, which is calculated as $\$ 45,000+$ (3 percent of $\$ 45,000$ ). Alternatively, this can also be calculated as $\$ 45,000$ $\times 1.03=\$ 46,350$. REJ: Please see the section "Cash In and Cash Out: Preparing and Using Budgets" for more information
96. Jamie wants to have $\$ 1,000,000$ for her retirement in 25 years. How much should she save annually if she expects to earn $10 \%$ on her investments?

## Graders Info :

The future value that Jamie wants to have for her retirement equals $\$ 1,000,000$. The time left for retirement is 25 years, and the interest rate is $10 \%$. Therefore, the present value of periodic payments equals $\$ 10,168.07$. REJ: Please see the section "Cash In and Cash Out: Preparing and Using Budgets" for more information.
97. The Hamptons want to have $\$ 1,750,000$ for their retirement in 30 years. How much should they save annually if they expect to earn $8 \%$ on their investments?

## Graders Info :

The future value that the Hamptons want equals $\$ 1,750,000$. The time left for retirement is 30 years, and the interest rate is $8 \%$. Therefore, the present value of periodic payments equals $\$ 15,48.01$. REJ: Please see the section " The Time Value of Money: Putting a Dollar Value on Financial Goals" for more information
98. The Flemings will need $\$ 80,000$ annually for 20 years during their retirement. How much will they need at retirement if they can earn a $4 \%$ rate of interest on their investment?

## Graders Info :

The value of periodic payments of the Flemings is $\$ 80,000$ annually. The time period is 20 years, and the rate of return is $4 \%$. Therefore, the present value of the annuity is $\$ 1,087,226$. REJ: Please see the section "The Time Value of Money: Putting a Dollar Value on Financial Goals" for more information

