

Part 1: Identifying and Defining Problems

TRUE/FALSE

1. A problem is the difference between the current state and where you want to be.

ANS: T PTS: 1 REF: Problem-Solving 2

2. Inertia means acting on a problem, when you are very familiar with it.

ANS: F PTS: 1 REF: Problem-Solving 4

3. The opinions and assumptions that your problem owner, stakeholders, and other important people hold are important factors in the success of your solution.

ANS: T PTS: 1 REF: Problem-Solving 6

4. The purpose of a problem statement is to find the problem cause and to define the solution.

ANS: F PTS: 1 REF: Problem-Solving 8

5. A cause is the reason for or the origin (root) of a change, such as customers being unable to afford travel vacations.

ANS: T PTS: 1 REF: Problem-Solving 10

6. Attacking the root cause of a problem is always the best approach.

ANS: F PTS: 1 REF: Problem-Solving 10

7. Testing a solution involves trying it on a small or limited basis.

ANS: T PTS: 1 REF: Problem-Solving 14

8. Open-science Problem-Solving is a form of outsourcing.

ANS: F PTS: 1 REF: Problem-Solving 18



9. The diagram shown above is sometimes called a fishbone diagram.

ANS: T PTS: 1 REF: Problem-Solving 10-11

10. The diagram shown above is good for brainstorming, but does not show cause-and-effect.

ANS: F PTS: 1 REF: Problem-Solving 10-11

COMPLETION

1. In an organization, a(n) _____ is an obstacle that stands in the way of achieving a desired goal.

ANS: problem

PTS: 1 REF: Problem-Solving 2

2. People usually solve problems in one of two ways: _____ or systematically.

ANS: intuitively

PTS: 1 REF: Problem-Solving 2

3. _____ are choices you make when faced with a set of options or alternatives.

ANS: Decisions

PTS: 1 REF: Problem-Solving 2

4. When you solve a problem for someone else, you assume the responsibility for developing a satisfactory solution for them, the _____.

ANS: problem owners

PTS: 1 REF: Problem-Solving 6

5. To link a problem to its cause, you must perform a _____ analysis, a study that determines the real basis for the problem.

ANS: root-cause

PTS: 1 REF: Problem-Solving 10

MATCHING

Please identify the letter of the choice that best matches the term below.

- | | |
|------------------------------------|------------------------|
| a. resource | b. type of information |
| 1. print | |
| 2. primary | |
| 3. interviews | |
| 4. informal | |
| 5. information found in a magazine | |

- | | | |
|-----------|--------|------------------------|
| 1. ANS: A | PTS: 1 | REF: Problem-Solving 5 |
| 2. ANS: A | PTS: 1 | REF: Problem-Solving 5 |
| 3. ANS: B | PTS: 1 | REF: Problem-Solving 5 |
| 4. ANS: A | PTS: 1 | REF: Problem-Solving 5 |
| 5. ANS: B | PTS: 1 | REF: Problem-Solving 5 |

MULTIPLE CHOICE

1. When you are _____, you solve a problem in a methodical and organized manner.
- | | |
|---------------|----------------------|
| a. intuitive | c. both a. and b. |
| b. systematic | d. neither a. nor b. |

ANS: B PTS: 1 REF: Problem-Solving 2

2. Variations on _____ include dilemmas, paradoxes, and difficulties, such as trouble performing tasks.
- | | |
|--------------|--------------|
| a. solutions | c. arguments |
| b. problems | d. actions |

ANS: B PTS: 1 REF: Problem-Solving 2

3. _____ is your knowledge of something without having to discover or learn it, and it is typically your first reaction to a problem or question.

- | | |
|---------------|--------------|
| a. Logic | c. Intuition |
| b. Creativity | d. Instinct |

ANS: C PTS: 1 REF: Problem-Solving 2

4. ____ are people who, like problem owners, are also affected by the problem or whose involvement you need to resolve the matter.
- a. Shareholders
 - b. Clients
 - c. Stakeholders
 - d. Users

ANS: C PTS: 1 REF: Problem-Solving 6

5. A problem ____ is a clear, concise description of the problem and the effect you expect from the solution.
- a. statement
 - b. sentence
 - c. document
 - d. policy

ANS: A PTS: 1 REF: Problem-Solving 8

6. A popular way to visualize a complex problem is by creating a ____ diagram.
- a. hierarchical
 - b. spin
 - c. true/false
 - d. cause-and-effect

ANS: D PTS: 1 REF: Problem-Solving 10

7. Complex problems are those that ____.
- a. have no clear boundaries
 - b. are unique
 - c. have no single optimal solution
 - d. all of the above

ANS: D PTS: 1 REF: Problem-Solving 12

8. If the potential risk is significant enough, you might need to take a different approach altogether, which is called risk ____.
- a. openness
 - b. avoidance
 - c. averaging
 - d. management

ANS: B PTS: 1 REF: Problem-Solving 14

9. When working in a company with a strong set of cultural norms, it is easy to adopt popular opinions and follow the expectations of others, which is called the ____.
- a. bandwagon effect
 - b. herd effect
 - c. both a. and b.
 - d. neither a. nor b.

ANS: C PTS: 1 REF: Problem-Solving 16

10. Successful Web sites such as StumbleUpon (www.stumbleupon.com) and Digg (www.digg.com) use ____ by inviting their visitors to vote on recommended Web sites, articles, restaurants, photos, or videos, for example, by submitting links or reviews.
- a. herding
 - b. crowdsourcing
 - c. outsourcing
 - d. crowd control

ANS: B PTS: 1 REF: Problem-Solving 18

Main problem: Decreasing tour sales

Criteria	Tour Value	Immediate Improvement	Customer Satisfaction	Score
Price	0	2	1	3
Promotion	0	0	0	0
Quality	1	0	1	2
Frequency	2	1	2	5

Subproblems: Price, Promotion, Quality, Frequency
 Ratings of how well each solution could solve the subproblem
 Total of ratings for each subproblem

11. Referring to the figure above, price, promotion, quality, and frequency are ____ of the main problem, “Decreasing tour sales.”

- a. subproblems
- b. children
- c. spin-offs
- d. deviations

ANS: A PTS: 1 REF: Problem-Solving 13

12. Referring to the figure above, breaking down a large, complex problem into smaller, solvable problems is called ____.

- a. following the herd
- b. setting the table
- c. divide and conquer
- d. rank and responsibility

ANS: C PTS: 1 REF: Problem-Solving 12

13. Referring to the figure above, the best solution for this company is ____.

- a. sending out more promotion materials
- b. improving the quality of the tours
- c. offering more frequent tours
- d. lowering the price of the tours

ANS: C PTS: 1 REF: Problem-Solving 13

14. When creating a problem statement, frame the problem for your audience by starting with a brief description of the ____.

- a. suggested solution
- b. ideal situation
- c. budget constraints
- d. risks involved

ANS: B PTS: 1 REF: Problem-Solving 7

15. The statement, “Even our most popular European tours show no increase in enrollment, despite heavy promotion” is an example of the ____ part of a problem statement.

- a. size and scope
- b. problem summary
- c. symptom
- d. consequences

ANS: A PTS: 1 REF: Problem-Solving 7

Darcy, an outside consultant, has agreed to solve the problem of low student test scores for a neighborhood school. Please answer the questions below.

16. Since she is solving a problem for someone else, the first step Darcy should take is to ____.

- a. give choices
- b. promote her solution
- c. recognize opinions
- d. ask for advice

ANS: D PTS: 1 REF: Problem-Solving 7

TOP: Critical Thinking

17. As she works on the solution, Darcy should communicate regularly with problem owners and stakeholders. It is suggested that she use ____ to create a log of your conversations, ideas, alternatives, and solutions.
- a. e-mail
 - b. memos
 - c. other documents
 - d. all of the above

ANS: D PTS: 1 REF: Problem-Solving 6
TOP: Critical Thinking

18. When presenting a final solution, Darcy should ____.
- a. present one solution
 - b. present many solutions, indicating which one she recommends
 - c. present many solutions, without indicating which one she recommends
 - d. none of the above

ANS: B PTS: 1 REF: Problem-Solving 6
TOP: Critical Thinking

MODIFIED TRUE/FALSE

1. Decisions are choices you make when faced with a set of options or alternatives.
- _____

ANS: T PTS: 1 REF: Problem-Solving 2

2. A cause is evidence of a change, such as a decrease in revenue. _____

ANS: F, symptom

PTS: 1 REF: Problem-Solving 10

3. A popular approach used to uncover and define problems is called 5 Whats.
- _____

ANS: F, Whys

PTS: 1 REF: Problem-Solving 10

4. Any decision you make or solution you implement involves some risk, which is an exposure to a chance of loss or damage. _____

ANS: T PTS: 1 REF: Problem-Solving 14

5. When working in a company with a strong set of cultural norms, it is easy to adopt popular opinions and follow the expectations of others, which is called the bandwagon effect.
- _____

ANS: T PTS: 1 REF: Problem-Solving 16

6. A crowd-serving bias is anything that leads you to see the data as you most want it to appear.
- _____

ANS: F, self-serving

PTS: 1 REF: Problem-Solving 16

7. Clintsourcing is a term coined by Jeff Howe in Wired magazine to characterize a way of using groups to solve problems. _____

ANS: F, Crowdsourcing

PTS: 1 REF: Problem-Solving 18

8. When developing a problem statement, describe subjective symptoms of the problem that others can observe. _____

ANS: F, objective

PTS: 1 REF: Problem-Solving 8

9. When gathering information, focus on objective facts. Ask “what?” not “who?”

ANS: T PTS: 1 REF: Problem-Solving 4

10. Stakeholders are people who are also affected or whose involvement you need to resolve the matter.

ANS: T PTS: 1 REF: Problem-Solving 6

ESSAY

1. Briefly describe these three common problem-solving traps: positive outcome bias, the bandwagon effect, and a self-serving bias.

ANS:

The positive outcome bias: Be aware of the symptoms of overconfidence: underestimating how long it will take to complete a task; overestimating the likelihood of something that you hope will occur; or being overly optimistic about your decisions and answers to questions.

The bandwagon effect: Organizations develop a unique culture and set of values that favor certain actions and behaviors. When working in a company with a strong set of cultural norms, it is easy to adopt popular opinions and follow the expectations of others, which is called the bandwagon effect.

Avoid self-serving bias: A self-serving bias is anything that leads you to see the data as you most want it to appear. You might make decisions or pursue solutions that suit your personal preferences. When you start to work on a problem, ask yourself if a particular outcome, solution, or choice is especially appealing to you. If so, try to be aware of it as you proceed.

PTS: 1 REF: Problem-Solving 16 TOP: Critical Thinking

2. Please describe the difference of solving a problem using a systematic approach versus an intuitive approach. In what type of situation is each method the most appropriate?

ANS:

When you are systematic, you solve a problem in a methodical and organized manner. Systematic Problem-Solving takes a reasoned, rational approach and is appropriate for larger, more complicated problems or situations that involve a lot of risk.

When you solve a problem intuitively, you react immediately and instinctively, without following a particular procedure. This reactive approach is well suited to situations where you need to make a quick decision or solve a routine problem. In those cases, you can often use your common sense to decide on a solution.

PTS: 1

REF: Problem-Solving 2

TOP: Critical Thinking