Problem Solving Skills for Health Care Providers
Lesson 5 of 5
Compare and Evaluate Problem Solutions

Learning Objectives

In this lesson you will learn the problem solving skill of comparing and evaluating problem solutions. You will learn how to:

1. Generate problem solutions
2. Rate and rank solutions
3. Select the most appropriate solution

Vocabulary and Key Terms

advice - an idea that is offered to a person about how to solve a problem or do something
aggressive - very forceful and bold
appliance - a device or small machine that has a particular purpose, such as a toaster, vacuum cleaner, washing machine, etc.
approach - a way of doing something
appropriate - proper; especially suitable
brainstorming - the offering of ideas by all members of a group to find ways to solve problems
category - a group or division
combination - something that is formed by putting several things together
comparing - studying in order to find out how persons or things are alike or different
complex - hard to understand or do
cons - bad things about an idea
consensus - an agreement by all or most of the people in a group
consult - to go to for information or advice
convince - to cause a person to believe or do something
cooperate - to work together to get something done
counselor - a person who gives ideas or suggestions to others about what to do
created - brought about; caused
criteria - standards, rules, or tests by which something can be judged
deadline - a set time by which something must be finished
definite - certain; clear
depressed - sad
diagnosed - identified, or named
discourage - to prevent by disapproving or raising objections
dread - to fear or worry about
enrolled - registered; signed up for
estimates - calculations that are close to correct
**evaluating** - deciding the quality or worth of
**exact** - correct; accurate
**experts** - persons who have great knowledge or skill in a special area
**expression** - a common word, phrase, or saying
**familiar** - well-known
**generate** - to create
**goal** - something a person wants and tries to get
**guarantee** - a promise of the quality of a product; the length of use expected from a product
**hard sell** - using a lot of pressure to convince someone to buy your product
**independently** - separately; alone
**inexpensive** - low in price
**maintain** - to keep in a certain condition
**manuals** - small books that give instructions or information about something
**method** - a way of doing something
**permanent** - lasting or meant to last for a very long time
**portable** - movable
**practical** - useful or sensible
**precise** - exact
**pressure** - a condition of trouble, strain, or stress that is hard to bear
**Problem-solving skills** - those skills related to thinking through and reacting effectively to different situations
**process** - a series of actions that are done in making or doing something
**production** - relating to the act or process of making something
**profit** - the amount of money left after all the costs of running a business have been paid
**promote** - to advance to a higher rank or job
**pros** - good things about an idea
**rank** - to give or assign a certain position or rank
**rate** - to judge according to certain standards
**reduce** - to decrease or lower
**reject** - to refuse to take, allow, use, or believe
**relevant** - having to do with what is being discussed or considered
**salary** - a fixed amount of money paid to a worker at regular times
**satisfied** - content
**separating** - setting apart or dividing into groups
**sequence** - a series of things, in order
**severe** - harsh; causing great difficulty or suffering
**solutions** - answers to a problem
**specific** - special; characteristic of something
**standard** - conforming to what is usual, regular, or typical
**succeeded** - managed to do what was planned
**supervisor** - manager; one who watches over and directs
**task** - a piece of work to be done
**temporary** - lasting only for a short time
**unrealistic** - not possible and practical; not able to be achieved
**variety** - a number of different kinds
**various** - of different kinds
workable - capable of being done
**Prescription for Understanding**

There is no set way to solve problems. The only good proof that a solution, or an answer to a problem, is a good one is that it makes the problem go away. Problem solving is as much a state of mind as it is a skill. Good problem-solvers have two things in common:

1. They can admit they have a problem.
2. They do what it takes to solve the problem.

This is not always easy. A lot of us make decisions too quickly. For example: a woman gets rid of her favorite dress that she can no longer fit into. One year later, after being on a diet and losing weight, she is back to her previous dress size.

What was the problem when this woman threw away the dress? Was her closet too crowded? Was she depressed about being overweight? Her solution may have created another problem. She did not take the time to think carefully about her problem situation. She needed to compare and evaluate possible solutions and decide which was most important to her.

In this unit, you will practice three skills. They will help you compare and evaluate problem solutions.

1. Generate or create problem solutions. Deciding on the solution goal and getting ideas from each other or brainstorming are parts of this skill.
2. Rate and rank solutions. All solutions have pros and cons, or can be compared by rating and ranking.
3. Select the most fitting or appropriate solution. Try what seems to be the best solution.

If the solution doesn't work, you may need to redo parts of the problem-solving process.

Read about how people generate, rank, and select solutions. You can work through the problems. You will be building your skills in comparing and evaluating solutions.

Learn more and test your skills in the exercises.
Skill Area #1: Generate Problem Solutions

Wouldn't it be nice if all problems solved themselves? It is true that some do. For example, a cold may go away by itself, even if you do nothing. But we want to talk about the problems that don't solve themselves. Some of these problems are serious and some are not.

Problem Examples

- You want to bring a grade in class up from B+ to A-.
- You are making a business profit. You want to increase it by 6%.
- Something is working. You want to make it work even better. You have time to think of a variety of solutions.

More Problem Examples

- Your car gets a flat tire one-hour before your cousin's wedding.
- Three workers call in sick. You are worried about meeting a production deadline by 3:00 p.m.

Something needs fixing soon. You probably have enough time to find a solution, but you feel some pressure. A lot of problems seem to fall into this group or category.

Your boss tells you that you have one month to improve car sales or you will be fired. You feel a lot of pressure. Something very serious will happen if you don't do something quickly.

Solution Goals

Think about how serious the problem is. This will help you to see a clear solution goal. The solution goal states changes you want to see in the situation. These changes will show that the problem has been solved. With a clearly stated solution goal, it is easier to come up with solutions.

Consider the example of the car with the flat tire.
**Example Exercise 1**

A. Your car gets a flat tire one-hour before your cousin's wedding. What is the solution goal for this problem? Choose the correct goal statement from the list below.

a. Get someone to change the tire for you  
b. Hitchhike to the wedding  
c. Ask a friend to drive you to the wedding  
d. Get to the wedding on time  
e. Change the tire yourself without getting your clothes dirty

If you chose “d,” good. Your solution goal is to get to the wedding on time. The other choices were all possible solutions. Are you surprised there were so many listed? There could be even more. It is important to think of many possible solutions. This is an important part of problem solving. Then you can select the best solution. But first you want to generate as many ideas as you can.

**Brainstorming**

What if you think about a problem but can't come up with solutions that fit the solution goal? Serious problems put us under a lot of pressure. Sometimes we have to be satisfied with doing the best that we can. Then we can try to be better prepared the next time. This may mean avoiding certain problems altogether! Have you ever heard the expression "an ounce of prevention is worth a pound of cure?" For example, you can avoid sudden car breakdowns. You can maintain your car regularly. You can stop problems on your job. You can make sure your boss knows that you care about the success of the business.

Still, problems are a part of everyone's life. We need problem solving skills. Then we have a chance to solve problems before they turn into the painful, serious type!

In Lesson 1 you read about not being shy about asking questions. Sometimes we are afraid we will look stupid to others if we ask about something.

This idea applies to thinking through problem solutions: You have to risk seeming stupid at times. This is especially true about the problem-solving stage called brainstorming. Brainstorming is something you can do alone or with others. Good brainstorming works only when everyone feels free to say whatever comes to mind about the problem. Good brainstorming means coming up with lots of different ideas for solutions. Later, you may throw away or reject some. At first, you need all the ideas you can get.

People can say things to each other that discourage or stop the good feeling you need for good brainstorming.
Suppose you suggested to a coworker that you could do a task faster if you worked together. Read the list of discouraging things your coworker might say to you. Try to notice if these words make you tighten up inside, or feel angry or shy:

- That's OK, but . . .
- It doesn't sound like you've thought about . . .
- Don't worry about it . . .
- What you mean is . . .
- You're stupid . . .
- Nothing will ever change . . .
- You can't . . .

Words like that discourage others from speaking up. Try not to let them discourage you. Try not to say them to other people.

When you brainstorm solutions to a problem, keep a good attitude. To make sure you understand what you have been reading about generating solution goals, try these exercises.

**Example Exercise 2**

A. Your child has begged you to watch her in a school play tomorrow. Your boss just told you he wants to send you out of town tomorrow.
   a. You talk your boss out of the assignment.
   b. You have to miss the play.
   c. You find some way not to hurt your child's feelings while not angering your boss.
   d. You tell your child not to be so demanding.

Answer “c” is correct. Your solution goal is to find some way not to hurt your child's feelings while not angering your boss. The others are possible solutions, not goals.
Example Exercise 3

Choose the word that fits into the sentence.

A. A solution __________ is a statement about changes you should see once a problem is solved.
   a. guess
   b. goal
   c. change
   d. brainstorm
   e. equation
   f. area

   If you chose “b,” you are correct. A solution goal is a statement about changes you should see once a problem is solved.

B. Good problem solving means you should not feel __________ about solutions you suggest.
   a. happy
   b. smart
   c. glad
   d. tired
   e. stupid
   f. bored

   The correct answer is “e.” Good problem solving means you should not feel stupid about solutions you suggest.

C. Trying to think of as many different solutions as you can is called ____________.
   a. a purpose
   b. guessing
   c. brainstorming
   d. thinking
   e. a goal
   f. memorizing

   If you chose “c,” great. Trying to think of as many different solutions as you can is called brainstorming.
Skill Check
Skill Area #1: Generate Problem Solutions
Exercise A

Read the problem situation below and the statements that follow. Choose whether each statement is a solution goal, a possible solution, or not connected to the solution goal.

Your boss tells you she wants to promote you to a better job. This news makes you so nervous that you can't sleep at night. You run a red light. You almost hit a person on the sidewalk.

1. Call your boss and tell her you quit.
   a. Solution goal
   b. Possible solution
   c. Not connected

2. Reduce the amount of stress so you can work normally.
   a. Solution goal
   b. Possible solution
   c. Not connected

3. Try to get more sleep so you can think clearly.
   a. Solution goal
   b. Possible solution
   c. Not connected

4. Talk to a counselor; try to understand why you dread the promotion.
   a. Solution goal
   b. Possible solution
   c. Not connected

5. Have your eyes checked.
   a. Solution goal
   b. Possible solution
   c. Not connected

6. Ask your boss to give you more time to learn about the new job.
   a. Solution goal
   b. Possible solution
   c. Not connected

7. Arrange to have your house cleaned so you have more time.
   a. Solution goal
   b. Possible solution
   c. Not connected
8. Make mistakes so your boss will fire you.
   a. Solution goal
   b. Possible solution
   c. Not connected

9. Clean your windshield so you can see people on the road.
   a. Solution goal
   b. Possible solution
   c. Not connected

10. Talk to a coworker about what the new job would be like.
    a. Solution goal
    b. Possible solution
    c. Not connected

11. Learn to do exercises that take away stress and nervousness.
    a. Solution goal
    b. Possible solution
    c. Not connected
Skill Check
Skill Area #1: Generate Problem Solutions
Exercise B

Read the following statements about generating solutions. Decide whether each one is true or false.

12. When problems are less serious, you usually have more time to think about solutions.
   a. True
   b. False

13. Brainstorming means trying to come up with the one best solution.
   a. True
   b. False

14. Most problems have only one solution.
   a. True
   b. False

15. A solution goal tells you what changes you should see once the problem has been solved.
   a. True
   b. False

16. "An ounce of prevention is worth a pound of cure" means that all problems have solutions.
   a. True
   b. False

17. Brainstorming works when everyone feels free to say whatever is on his or her mind.
   a. True
   b. False

18. You can do brainstorming alone or with a group of people.
   a. True
   b. False

19. To be a good problem solver, you must believe that your ideas are as good as anybody's.
   a. True
   b. False

20. Most problems can't be solved because nothing ever really changes.
   a. True
   b. False
21. A possible solution is the same thing as a solution goal.
   a. True
   b. False

22. A clearly stated solution goal makes it easier to generate possible solutions.
   a. True
   b. False

23. The more serious the problem is, the more possible solutions there are.
   a. True
   b. False
**Skill Check**  
**Skill Area #1: Generate Problem Solutions**  
**Exercise C**

Do you remember Miss Darcy and her burned toast from Unit Six? She is still having trouble with that toaster. The relevant facts of the problem have been identified.

- The toaster continues to pop up.
- The toaster always burns the toast, no matter what setting it is on.
- The temperature setting controls the amount of heat that gets to the toast.

Now Miss Darcy needs help separating possible solutions from the solution goal and from information that is not connected to the problem. Read the following statements and choose whether each statement is a solution goal, a possible solution, or not connected to the solution goal.

24. By next week, be able to enjoy toast that is not burned.  
   a. Solution goal  
   b. Possible solution  
   c. Not connected

25. Buy a new temperature setting control and spring; fix the toaster.  
   a. Solution goal  
   b. Possible solution  
   c. Not connected

26. Ask a friend to look at the toaster and advise her.  
   a. Solution goal  
   b. Possible solution  
   c. Not connected

27. Throw out the toaster. Heat the toast in the oven.  
   a. Solution goal  
   b. Possible solution  
   c. Not connected

28. Get a friend to fix the toaster.  
   a. Solution goal  
   b. Possible solution  
   c. Not connected

29. Eat donuts for breakfast.  
   a. Solution goal  
   b. Possible solution  
   c. Not connected
30. Take the toaster to an appliance repairperson to be fixed.
   a. Solution goal
   b. Possible solution
   c. Not connected

31. Send the toaster back to the factory.
   a. Solution goal
   b. Possible solution
   c. Not connected

32. Give the toaster away.
   a. Solution goal
   b. Possible solution
   c. Not connected

33. Buy a new toaster.
   a. Solution goal
   b. Possible solution
   c. Not connected
Skill Area #2: Rate and Rank Solutions

Most problems have a number of possible solutions. Some solutions will probably work out better than others. You need a way to decide the worth of each solution. You need to rate the solutions carefully and then rank them.

Remember from Unit Two that to rate means to describe people, objects, or pieces of information by some standard system. You practiced rating employees and washing machines. Then you learned that to rank means to put in order according to a rating. You practiced ranking basketball players. Now you can apply these skills to rating and ranking possible problem solutions.

The rating system you apply depends on the kind of problem you face and the goals you set for a solution.

Read the following problem situation.

Jane is suffering from goose bumps in an office that is too cold. She can't think about work until she warms up.

Jane thought of two solution goals that would solve her problem: Either she has to raise the temperature or she must adjust to the cold. She spoke with the building supervisor about raising the temperature. He said, "Sorry Jane, but it is company policy to leave all thermostats at 60°F." Now she considers only solutions on how to adjust to the cold. She could buy a heater, wear gloves, drink hot cocoa, or work at home. She will now rate her possible solutions by how warm they make her feel.

Pros and Cons

One type of rating system helps with many types of problems; that is to list the pros and cons of using each solution. In real life, problem solutions are not likely to be "all bad" or "all good." If they were, it would be simple to select a solution--we might not think we had a problem at all!

Most problems are hard to figure out, or complex, with possible solutions that have a mixture of pros and cons. Pros are the good things or pluses. Cons are the bad things or minuses. We have to sort out the pros and cons. Then we have to decide how important they are. Every situation is different.

Let's go back to Jane's problem of goose bumps at the office. One possible solution is to wear gloves or mittens. What are the pros and cons?

Pros

1. Her hands will feel warm.
2. It's easy to bring gloves.
3. Gloves are inexpensive (not costly).
**Cons**

1. She may have trouble holding a pen to write.
2. Other parts of her body will still be cold.
3. People may think she's a little weird.

This type of rating system is like putting the pros on one side of a balance and the cons on the other. Which way will the balance tip?

Will the balance be even if you have the same number of pros as cons? No. Some will be very important to you, or have more weight. Others will be less important, or have less weight. People have different ideas about what is important. You might not care if people think you're a little weird. But our friend Jane might be very worried about what others think.

You need to look at the pros and cons of each of your possible solutions in this way. Once you have rated all your possible solutions, you will rank them by putting them in order. You will compare the pro and con ratings for each solution.

**Needed Information**

You might need to get information about some of the solutions before you can decide. Remember that in Unit One you located information. You decided whether or not it was important to your need. These skills are needed here.

In the example, suppose Jane chose another possible solution--to bring a portable heater. What are some of the possible pros and cons of this solution? Does Jane have all the information she needs to evaluate this possible solution?
You might have said some of these things about the second solution:

**Pros**

1. A heater would keep you warm all over.
2. You could easily turn a heater off and on as needed.

**Cons**

1. A heater might be expensive. (Get information!)
2. A heater might blow a fuse. (Get information!)

Suppose Jane gets the information. She discovers that a heater costs more than she can afford. She also finds that the heater will blow a fuse in her office. How will she rank the first and second solutions? She will have to rank the gloves high and the heater low.

As she gathers information on the possible solutions, she will need to use many sources—books, manuals or records with data. She may want to consult experts. Some of this information can be definite and exact or precise. But some will be based on estimates—educated guesses about how solutions are likely to work. You learned to make estimates in Unit Three. This skill will be important as you work on rating and ranking solutions.

**Rating Standards**

Another type of rating system involves selecting standards or criteria. Standards are like measuring sticks. Standards are a way of stating what matters. (You did some of this in listing pros and cons—you thought about cost, ease of solution, etc.)

Two common standards for a problem solution are:

- Is it useful?
- Is it practical or workable?

Questions to help you decide whether or not the solution is workable are—

- Is it possible for you to carry out the solution?
- Do you have time?
- Will you need money?
- Will other people cooperate?
- Will you need transportation?
- Are you the kind of person who can carry this out?
Questions to help you decide whether or not the solution is useful are—
- Will it correct your problem?
- Will it correct part of the problem or the whole problem?
- Will it be a temporary (short-term) solution or a permanent (long-term) solution?

The form above is one way to organize these ideas.

**Example Exercise 4**

Practice rating and ranking solutions by trying this sample exercise. This exercise is a little harder than the example of the cold office.

Here's the situation:

Fred travels the 10 miles to and from work by bus. City tax dollars pay for part of the bus service. In the recent election, the people voted against taxes for buses. The bus company has had to cut out some of its routes. Fred's bus route was cut out. Fred doesn't own a car or bike. He earns a good salary. He is saving to buy a home. The winters are severe where he lives. His boss wants him to be at work on time each day. He was told that some other employees live near him. The crime rate in the city is growing.

Fred has thought of four possible solutions. He has gotten information about them. How would you rate the solutions for workability and usefulness? Rank them (A for the best solution, D for the worst).

Solutions:
- Hitchhike
- Bike
- Drive a car
- Pay to ride with someone else
Here's one way to fill out your rating chart. Other ways may be reasonable also. Check with your instructor.

The last two solutions are rated the same in workability and usefulness. But driving a car may be less workable if Fred is saving to buy a house. So he might want to try to get a ride before he would buy a car.

The criteria used in this exercise were—Is it workable?—useful? Other criteria might be used for other problems. The important thing is that the criteria or standards used to rate the possible solutions match the goals. Remember that in Lesson 4 you worked on setting goals with standards to match. For example, you could rate and rank possible solutions by their cost. The cheapest solution would be ranked first. But if your goal is high quality, the cheapest solution might not work for you.
Skill Check
Skill Area #2: Rate and Rank Solutions
Exercise D

Now you have identified the solution goal and some possible solutions for Miss Darcy. Help Miss Darcy begin to rate the possible solutions. Begin by thinking about the pros and cons of possible solutions.

Below is a list of statements about each possible solution. Decide whether the statement is a pro or con. Then connect each pro or con to the correct possible solution. Here are the seven possible solutions.

1. Fix the toaster herself
2. Get advice from friend
3. Friend fixes toaster
4. Return toaster to factory
5. Appliance repair person fixes toaster
6. Buy new toaster
7. Heat toast in oven

34. The toaster's guarantee may have run out.
   a. Pro
   b. Con

35. What is the letter of the solution?
   a. Fix toaster herself
   b. Friend fixes toaster
   c. Return toaster to factory
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven

36. Miss Darcy never fixed an electrical appliance before.
   a. Pro
   b. Con

37. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Return toaster to factory
   e. Buy new toaster
   f. Heat toast in oven
38. Toasters are expensive.
   a. Pro
   b. Con

39. What is the letter of the solution?
   a. Get advice from friend
   b. Friend fixes toaster
   c. Return toaster to factory
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven

40. The toaster might be fixed free of charge.
   a. Pro
   b. Con

41. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Return toaster to factory
   e. Appliance repair person fixes toaster
   f. Buy new toaster

42. A new toaster won't burn the toast.
   a. Pro
   b. Con

43. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Return toaster to factory
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven
44. She might be asking a big favor.
   a. Pro
   c. Con

45. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven

46. The parts are not expensive to purchase.
   a. Pro
   b. Con

47. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Return toaster to factory
   e. Appliance repair person fixes toaster
   f. Heat toast in oven

48. An appliance repairperson will surely fix the toaster.
   a. Pro
   b. Con

49. What is the letter of the solution?
   a. Get advice from friend
   b. Friend fixes toaster
   c. Return toaster to factory
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven
50. A friend may not know enough about toasters to give advice.
   a. Pro
   b. Con

51. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven

52. It may take a long time to get the toaster fixed if the repairperson is very busy.
   a. Pro
   b. Con

53. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Return toaster to factory
   e. Appliance repair person fixes toaster
   f. Buy new toaster

54. A friend may know what's wrong with the toaster.
   a. Pro
   b. Con

55. What is the letter of the solution?
   a. Get advice from friend
   b. Friend fixes toaster
   c. Return toaster to factory
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven
56. A friend wouldn't charge to fix the toaster.
   a. Pro
   b. Con

57. What is the letter of the solution?
   a. Fix the toaster herself
   b. Friend fixes toaster
   c. Return toaster to factory
   d. Appliance repair person fixes toaster
   e. Buy new toaster
   f. Heat toast in oven

58. Miss Darcy can have her toast right away.
   a. Pro
   b. Con

59. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Return toaster to factory
   e. Appliance repair person fixes toaster
   f. Heat toast in oven

60. It's a waste of energy and time.
   a. Pro
   b. Con

61. What is the letter of the solution?
   a. Fix the toaster herself
   b. Get advice from friend
   c. Friend fixes toaster
   d. Return toaster to factory
   e. Buy new toaster
   f. Heat toast in oven
Skill Check  
Skill Area #2: Rate and Rank Solutions  
Exercise E

Look again at Miss Darcy's possible solutions listed on the rating chart. The solutions have already been rated one possible way.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Workable?</th>
<th>Useful?</th>
<th>Rank (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Buy parts and install</td>
<td>X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Friend gives advice</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Friend fixes toaster</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4. Send toaster to factory</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5. Take to appliance repairperson</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Buy new toaster</td>
<td>X X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7. Heat toast in oven</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You decide how to rank the solutions, based on their ratings. Then answer the questions about rating and ranking solutions.

62. Which solution did you rank #1?
   a. Solution 3
   b. Solution 5
   c. Solution 2
   d. Solution 7

63. Which solution did you rank last?
   a. Solution 1
   b. Solution 7
   c. Solution 2
   d. Solution 4

64. Which solution is rated the same as solution 1?
   a. Solution 2
   b. Solution 4
   c. Solution 6
   d. Solution 3
65. Where two solutions are rated the same, you have to "break the tie" to give them a different rank. When you do this, you decide one has a little more __________ than the other (select one).
   a. weight
   b. usefulness
   c. cost
   d. workability

66. The standards used in this rating exercise are: (select one)
   a. Workability and usefulness
   b. Cost and difficulty
   c. Time and cost
   d. Usefulness and rank

Select the correct word to complete the following sentences.

67. Most problems are complex. They have a mixture of __________ and cons.
   a. goals
   b. pros
   c. matters
   d. rating
   e. costs
   f. ranking

68. Describing information by some standard is called __________ the information.
   a. ranking
   b. selecting
   c. stabilizing
   d. passing
   e. rating
   f. grading

69. __________ means to put in order according to a rating.
   a. Rating
   b. Grading
   c. Ranking
   d. Selecting
   e. Passing
   f. Stabilizing

70. A standard is a way of saying what __________ most in comparing situations.
   a. costs
   b. pros
   c. cons
   d. rates
   e. ranks
   f. matters
**Skill Area #3: Select the Most Appropriate Solution**

You have ranked the possible solutions on a ranking system. Now you have a guide for selecting a solution. You might look at the rankings and see that the choice is easy. One of the problem solutions might clearly be better than the others. But the situation might not always be so clear-cut. Several solutions might be close in the rankings.

Look at all the solutions that rank high. Sometimes more than one solution can be chosen. A mixture, or combination of solutions, could solve the problem better than one alone. Here's an example:

Maria needs more technical training to advance in her job. Two possible solutions rank high:

1. Reading special magazines on the subject
2. Taking a night-school course

It might be possible to do both. If so, she will learn even faster. She might do better in school because she is also reading about the subject at home. This could be a third solution.

You might be working on a team with others to solve a problem. The team needs to agree on the goals and a rating system. The team will bring together and discuss information on each of the possible solutions. Then the rating and ranking can be done either independently (each team member alone) or by consensus (team decision). If the team members rate and rank the solutions independently, their rankings must be combined to select a solution.

One simple way to combine rankings is to add the numbers for each solution. For example, if the rankings given by three team members to solutions A, B, and C are listed in the table above (with a "1" for best solution), these rankings can be added to get a total team score. The lowest team total is the team's first-ranked solution, the next lowest is ranked second, and so forth. Then the selection process goes on from there.

Suppose a solution has been selected. Do you think we can say that the problem is as good as solved? If you said no, you are correct. You must try or test solutions to see whether the problem is solved. It will take time to see the results of the chosen solution. When results are available, you can compare these results with the goals. Then people can decide whether the solution succeeded or failed.

If Your Solution Doesn't Work, What Then?
Suppose you have found a successful solution to your problem. Then your problem is solved according to your goals. You don't need to do anything more about the problem. However, suppose you decide that the solution has failed. Then you should go back again through the problem-solving process. Find out what went wrong and how to correct the error. Return to some earlier step in the problem solving order or sequence and change that step to come up with a solution that will succeed.

You might decide that you selected the wrong solution because you identified or diagnosed the problem incorrectly. Then you will go back to diagnose the problem more carefully. You might decide that your goals for a successful solution were unrealistic or not practical. Then you will set new goals for a successful solution. You might decide that you made a mistake in rating and ranking (evaluating) the various solutions. You might decide that you did not consider enough solutions. Perhaps you did not gather enough information of the right type. Then you must generate new solutions or recheck your method of comparing solutions.

Now you are thinking like a problem-solver. You have learned skills needed to get hold of problem situations before they take hold of you.

**Example Exercise 5**

Practice ranking and selecting solutions. Read the problem situation below. Complete the ranking chart on a piece of scratch paper. Then answer the questions.

The Corey family is trying to decide how to spend their vacation together. They have come up with 4 solutions.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Tom</th>
<th>Bill</th>
<th>Sal</th>
<th>Mom</th>
<th>Dad</th>
<th>Family Total</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disney World</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Camping</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Home barbecue</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>The Bahamas</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

The chart above shows how each family member ranked each solution.
A. According to the ranking system, where should the family spend their vacation?
   a. Disney World
   b. Camping
   c. Home barbecue
   d. The Bahamas

   The correct answer is “a, Disney World.” After adding the numbers across for the family total, and then ranking them (highest totals rank lower than lower totals), Disney World ranked first.

B. Which family members got their first choice for vacation?
   a. Bill
   b. Dad
   c. Tom and Sal
   d. Mom and Sal

   If you chose “c, Tom and Sal,” you are right. The top vacation spot is Disney World. Only Tom and Sal put Disney World as their first choice for the vacation.

C. Which family member wanted the family's first choice the least?
   a. Bill
   b. Dad
   c. Tom
   d. Mom

   The correct answer is “b, Dad.” Dad wanted the family's first choice vacation spot the least.

D. What are the total points for the family's first choice?
   a. 17
   b. 11
   c. 12
   d. 10

   If you chose “d, 10,” you are correct. Disney World rated first with 10 points.
Anita sells Fingerfine Soap door-to-door. She has many old, familiar customers. She gets along well with them. Recently, the company has put pressure on Anita to increase her sales. The company wants her to keep up with the other salespeople in the company. Anita has never used pressure or a "hard sell" approach. She is a kind and shy person. She would rather let her customers convince themselves to buy her product.

Anita had the problem of quickly increasing sales or losing her job. Anita enrolled in a training program. She hoped to change her approach and improve her skill as a saleswoman. The course taught her bold or aggressive "hard sell" sales methods. Anita did very well in the training program. Anita has been working hard to use the methods taught in the training program. She is now as aggressive as other salespeople are. She has three times the number of new customers she usually gets in a month. Unfortunately, she has lost many of her old customers. She cannot keep her new customers for long. Her sales are about the same as they were before she enrolled in the program.

Select the best answer.

71. A clear statement of Anita's problem is:
   a. Anita is too meek.
   b. Anita must increase her sales to keep her job.
   c. Anita's customers don't know her well enough.
   d. Anita must enroll in a training program.

72. What solution did Anita choose to try?
   a. Training to use a more aggressive approach
   b. Letting her customers convince themselves to buy
   c. Working on getting new customers
   d. Relying on kindness and good manners to make sales

73. Anita's goal of increased sales has not been met. Why?
   a. She didn't do well in the training program.
   b. She isn't able to get along with people.
   c. The solution was not the right one for Anita.
   d. People don't like the soap after a while.

74. Another possible solution for Anita is:
   a. Enroll in another training program.
   b. Use more soap herself.
   c. Become even more aggressive.
   d. Ask her old customers for names of friends to try to get new customers.
Skill Check
Skill Area #3: Select the Most Appropriate Solution
Exercise G

The following exercise will help you practice ranking and selecting solutions. Read the problem situation.

James and his coworkers collect money to buy coffee each week. At the end of the month, they had $15.00 left in their coffee fund. They are deciding how to spend the extra money. They have four possible solutions.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Individual Ranking</th>
<th>Group Total</th>
<th>Group Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy donuts</td>
<td>1 2 1 2 4</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Donate to Goodwill</td>
<td>2 1 3 3 3</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Have party</td>
<td>4 4 4 4 1</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Return money</td>
<td>3 3 2 1 2</td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

The chart above shows how each coworker ranked each solution. Using the chart, figure out the group totals and group rankings.

75. According to the ranking system, how should the group spend the money?
   a. Donate to Goodwill
   b. Have party
   c. Return money
   d. Buy donuts

76. Which coworkers got their first choice?
   a. A and C
   b. C and E
   c. B and D
   d. A and B
77. Which coworker wanted the group choice the least?
   a. coworker B
   b. coworker E
   c. coworker D
   d. coworker A
   e. coworker C

78. What are the total points for the group's first choice?
   a. 17
   b. 11
   c. 10
   d. 12

79. If you were going to combine three solutions, which solution would you leave out?
   a. Donate to Goodwill
   b. Return money
   c. Buy donuts
   d. Have party
Skill Check
Skill Area #3: Select the Most Appropriate Solution
Exercise H

Read each problem. Decide if the solution succeeded or not. Choose the next step that fits.

80. Problem: You have injured your index finger playing volleyball.
Solution Goal: Finger moving normally; no pain
Solution Tried: One week with no volleyball
Results: Finger moves normally; still hurts

What is the next step?
   a. Nothing needed
   b. Try another solution

81. Problem: Your neighbor has poison ivy growing in an area near your house.
Solution Goal: Poison ivy removed
Solution Tried: Told neighbor he had poison ivy growing on his property.
Results: Neighbor got rid of the poison ivy.

What is the next step?
   a. Nothing needed
   b. Try another solution

82. Problem: You find a long line at the bank when you go to cash a check.
Solution Goal: Cash the check without wasting time.
Solution Tried: Run another errand and come back.
Results: Line is still long.

What is the next step?
   a. Nothing needed
   b. Try another solution

83. Problem: Your morning paper has not been delivered for three days.
Solution Goal: Receive the morning paper daily
Solution Tried: Left a note at the papergirl’s house
Results: No morning paper

What is the next step?
   a. Nothing needed
   b. Try another solution
84. Problem: Your camera is out of film.
Solution Goal: Have pictures of tonight’s party
Solution Tried: Called a friend to bring a camera with film.
Results: Friend forgot to bring camera.

What is the next step?
   a. Nothing needed
   b. Try another solution

85. Problem: The person who rides to work with you is often late meeting you.
Solution Goal: Arrive at work on time
Solution Tried: Told rider that car would leave at a certain time.
Results: You arrive at work on time—sometimes without the rider.

What is the next step?
   a. Nothing needed
   b. Try another solution

86. Problem: You have a stain on a new suit.
Solution Goal: Have a clean suit
Solution Tried: Got suit dry cleaned
Results: Stain is still on the suit.

What is the next step?
   a. Nothing needed
   b. Try another solution

87. Problem: Your coworker spends a lot of time talking to you. You have a hard time getting your work done.
Solution Goal: Get your work done on time.
Solution Tried: Asked coworker to call you in the evening instead of talking at work.
Results: Your work is done on time.

What is the next step?
   a. Nothing needed
   b. Try another solution
Now select your area of work and then turn to the appropriate page for “Let’s Apply to Your Workplace” questions:

- Nursing Assistant ---------------------- Page 391 - 396
- Dietary Services ---------------------- Page 397 - 402
- Environmental Services ------------- Page 403 - 406
Let’s Apply to Nurse Assistant
Problem Solving - Lesson 5 of 5

Skill Area #1: Generate Problem Solutions

When a Nurse Assistant perceives a problem, he/she must determine a solution goal. A solution goal identifies what the Nurse Assistant is trying to achieve.

When a problem has been recognized and its causes identified the development of a workable solution can begin. The first step in this process is to identify all possible solutions.

The following exercises measure your ability to generate solutions.

1. You have been instructed to inventory all of the materials in the supply closet by the end of the shift tomorrow, but you do not really have time to do that and finish your regular tasks. Which of the following is the least likely solution to the problem?
   a. Come in early tomorrow and complete the inventory
   b. Ask a coworker who has some extra time to help you
   c. Call in sick tomorrow
   d. Let your supervisor know about your work schedule and ask her for a suggestion

2. You have spotted one of your coworkers taking home supplies in his lunch container. You are responsible for the supplies that he is stealing. Which of the following is the least likely solution to the problem?
   a. Have the person arrested immediately
   b. Tell the person that you are responsible for the item and ask him to return it and report himself to the supervisor
   c. The item is not very expensive so just forget it
   d. Call a department meeting and ask for the anonymous return of the property

3. You are instructed to train a new employee who is the girlfriend of your husband, from whom you have recently separated. Which of the following is the least likely solution to the problem?
   a. Smile, this is your chance to get revenge
   b. Tell your supervisor about your situation and ask her to appoint someone else to do the job
   c. Show her all the correct tasks of the job while gritting your teeth
   d. Keep the training on a completely professional level
4. Your supervisor has issued an order that no radios will be played during work. You feel, and studies have shown, that music is sometimes helpful to productivity. Which of the following is the least likely solution to the problem?
   a. Express your desire to have music at work
   b. Ask your supervisor about her objection to the radio and whether she knows about the productivity study
   c. Tell your supervisor that you know a way to increase work efficiency and cite the productivity study
   d. Forget the radio and do without music

5. Your supervisor tells you that you are going to have to start using a computer terminal to keep records of all services and supplies that each resident receives. You have never turned on a computer. Which of the following is the least likely solution to the problem?
   a. Buy a home computer and learn how to use it
   b. Let your supervisor know about your lack of experience and request some training
   c. Go to the local community learning center and take some classes
   d. Don't tell anyone about your lack of experience
**Skill Area #2: Rate and Rank Solutions**

The final two phases of problem solving involve rating and ranking of possible solutions to a particular problem and selecting the most appropriate solution. Since the final selection is so closely related to the ranking process we will use the ranking process to choose the best solution to each problem. Your top ranked solution will be the best possible solution.

6. You have been instructed to inventory all of the materials in the supply closet by the end of the shift tomorrow, but you do not really have time to do that and finish your regular tasks. Which of the following is the least likely solution to the problem?
   A. Come in early tomorrow and complete the inventory
   B. Ask a coworker who has some extra time to help you
   C. Call in sick tomorrow
   D. Let your supervisor know about your work schedule and ask her for a suggestion

Rank the solutions from best to worst
   a. C, A, B, D
   b. D, B, A, C
   c. A, B, C, D
   d. C, D, B, A

7. You have spotted one of your coworkers taking home supplies in his lunch container. You are responsible for the supplies that he is stealing. Which of the following is the least likely solution to the problem?
   A. Have the person arrested immediately
   B. Tell the person that you are responsible for the item and ask him to return it and report himself to the supervisor
   C. The item is not very expensive so just forget it
   D. Call a department meeting and ask for the anonymous return of the property

Rank the solutions from best to worst
   a. C, A, B, D
   b. D, B, A, C
   c. A, B, C, D
   d. C, D, B, A
8. You are instructed to train a new employee who is the girlfriend of your husband, from whom you have recently separated. Which of the following is the least likely solution to the problem?
   A. Smile, this is your chance to get revenge
   B. Tell your supervisor about your situation and ask her to appoint someone else to do the job
   C. Show her all the correct tasks of the job while gritting your teeth
   D. Keep the training on a completely professional level

Rank the solutions from best to worst:
   a. C, D, B, A
   b. D, B, A, C
   c. A, B, C, D
   d. C, A, B, D

9. Your supervisor has issued an order that no radios will be played during work. You feel, and studies have shown, that music is sometimes helpful to productivity. Which of the following is the least likely solution to the problem?
   A. Express your desire to have music at work
   B. Ask your supervisor about her objection to the radio and whether she knows about the productivity study
   C. Tell your supervisor that you know a way to increase work efficiency and cite the productivity study
   D. Forget the radio and do without music

Rank the solutions from best to worst:
   a. C, A, B, D
   b. D, B, A, C
   c. A, B, C, D
   d. C, B, D, A

10. Your supervisor tells you that you are going to have to start using a computer terminal to keep records of all services and supplies that each resident receives. You have never turned on a computer. Which of the following is the least likely solution to the problem?
    A. Buy a home computer and learn how to use it
    B. Let your supervisor know about your lack of experience and request some training
    C. Go to the local community learning center and take some classes
    D. Don’t tell anyone about your lack of experience

Rank the solutions from best to worst:
    a. C, A, B, D
    b. D, B, A, C
    c. A, B, C, D
    d. C, D, B, A
Skill Area #3: Select the Most Appropriate Solution

Sometimes it is hard to pick the best solution to a problem. One simple way is to rate or judge the solutions. You can rate the solution by asking two questions about each solution.

1. Is the solution workable? Can you actually do it?
2. How practical is the solution? A solution is highly practical if it takes a small amount of time, money, or trouble. A solution is not practical if it costs a lot of time and money.

Imagine that your facility has been having a difficult time hiring a Medication Aid for second shift. No one is available to hire that is certified to pass medications. As a result, on some days there is no one available to pass medications, and the head nurse has to come to the floor and do the job. Your department has met to discuss the situation and has come up with the following possible solutions to the problem:

- tell the residents that they will no longer get their medications as needed.
- force one of the first shift staff to work overtime every day to pass medications.
- contract with a facility in another community to provide the service.
- train one of the Nurse Aids currently on the staff to work on the second shift and pass medications.

You can put your information in a form like this:

<table>
<thead>
<tr>
<th>Rating solutions – Providing Medications on the Second Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution</strong></td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>A. tell the residents that they will no longer get their medications as needed</td>
</tr>
<tr>
<td>B. force one of the first shift staff to work overtime every day to pass medications</td>
</tr>
<tr>
<td>C. contract with a facility in another community to provide the service</td>
</tr>
<tr>
<td>D. train one of the Nurse Aids currently on the staff to work on the second shift and pass medications</td>
</tr>
</tbody>
</table>

Now answer the following questions on rating the workable and practical features of solutions.

11. How would you rate “Solution A - tell the residents that they will no longer get their medications as needed” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes
12. How would you rate “Solution B - force one of the first shift staff to work overtime every day to pass medications” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

13. How would you rate “Solution C - contract with a facility in another community to provide the service” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

14. How would you rate “Solution D - train one of the Nurse Aids currently on the staff to work on the second shift and pass medications” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

15. Which solution is best, based on both workable and practical ratings?
   a. Solution A - tell the residents that they will no longer get their medications as needed
   b. Solution B - force one of the first shift staff to work overtime every day to pass medications
   c. Solution C - contract with a facility in another community to provide the service
   d. Solution D - train one of the Nurse Aids currently on the staff to work on the second shift and pass medications
Skill Area #1: Generate Problem Solutions

When a Dietary Services worker perceives a problem, he/she must determine a solution goal. A solution goal identifies what the Dietary Service worker is trying to achieve.

When a problem has been recognized and its causes identified, the development of a workable solution can begin. The first step in this process is to identify all possible solutions.

The following exercises measure your ability to generate solutions.

1. You have been instructed to prepare the meat dish for tomorrow's lunch, but you do not really have time to finish your regular tasks. Which of the following is the least likely solution to the problem?
   a. Come in early tomorrow and get the dish ready
   b. Ask a coworker who has some extra time to help you
   c. Call in sick tomorrow
   d. Let your supervisor know about your work schedule and ask her for a suggestion

2. You have spotted one of your coworkers taking home company property in his lunch container. You are responsible for the item he is stealing. Which of the following is the least likely solution to the problem?
   a. Have the person arrested immediately
   b. Tell the person that you are responsible for the item and ask him to return it and report himself to the supervisor
   c. The item is not very expensive so just forget it
   d. Call a department meeting and ask for the anonymous return of the property

3. You are instructed to train a new employee who is the girlfriend of your husband from whom you have recently separated. Which of the following is the least likely solution to the problem?
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4. Your supervisor has issued an order that no radios will be played during work. You feel, and studies have shown, that music is sometimes helpful to productivity. Which of the following is the least likely solution to the problem?
   a. Express your desire to have music at work
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   c. Tell your supervisor that you know a way to increase work efficiency and cite the productivity study
   d. Forget the radio and do without music

5. Your supervisor tells you that you are going to have to start keeping records and assessing menus on the computer. You have never turned on a computer. Which of the following is the least likely solution to the problem?
   a. Buy a home computer and learn how to use it
   b. Let your supervisor know about your lack of experience and request some training
   c. Go to the local community learning center and take some classes
   d. Don't tell anyone about your lack of experience
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The final two phases of problem solving involve rating and ranking of possible solutions to a particular problem and selecting the most appropriate solution. Since the final selection is so closely related to the ranking process we will use the ranking process to choose the best solution to each problem. Your top ranked solution will be the best possible solution.

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   d. C, A, B, D

9. Your supervisor has issued an order that no radios will be played during work. You feel, and studies have shown, that music is sometimes helpful to productivity. Consider these possible solutions.
   A. Demand your right to have music at work
   B. Ask your supervisor about her objection to the radio and whether she knows about the productivity study
   C. Tell your supervisor that you know a way to increase work efficiency and cite the productivity study
   D. Forget the radio and do without music

Rank the solutions from best to worst
   a. C, A, B, D
   b. D, B, A, C
   c. A, B, C, D
   d. C, B, D, A

10. Your supervisor tells you that you are going to have to start keeping records and assessing menus on the computer. You have never turned on a computer. Consider these possible solutions.
    A. Buy a home computer and learn how to use it
    B. Let your supervisor know about your lack of experience and request some training
    C. Go to the local community learning center and take some classes
    D. Don’t tell anyone about your lack of experience

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1. Is the solution workable? Can you actually do it?
2. How practical is the solution? A solution is highly practical if it takes a small amount of time, money, or trouble. A solution is not practical if it costs a lot of time and money.

Imagine that your facility has been having a difficult time hiring staff for the dietary services area. No one is available to hire that knows how to bake. As a result, on some days there is no one available to bake the cookies, cake, and other baked treats that the residents look forward to having. Your department has met to discuss the situation and has come up with the following possible solutions to the problem:

- tell the residents that they will no longer have the baked treats and deserts.
- force one of the food preparation staff to work overtime every day to prepare the treats.
- contract with a local bakeshop to furnish the baked goods.
- train one of the kitchen support staff to do the baking and hire a replacement for them.

You can put your information in a form like this:

<table>
<thead>
<tr>
<th>Rating solutions – Providing Baked Treats for Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution</td>
</tr>
<tr>
<td>Workable? Practical?</td>
</tr>
<tr>
<td>A. tell the residents that they will no longer have the baked treats and deserts.</td>
</tr>
<tr>
<td>B. force one of the food preparation staff to work overtime every day to prepare the treats</td>
</tr>
<tr>
<td>C. contract with a local bakeshop to furnish the baked goods</td>
</tr>
<tr>
<td>D. train one of the kitchen support staff to do the baking and hire a replacement for them</td>
</tr>
</tbody>
</table>

Now answer the following questions on rating the workable and practical features of solutions.

11. How would you rate “Solution A - tell the residents that they will no longer have the baked treats and deserts” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes
12. How would you rate “Solution B - force one of the food preparation staff to work overtime every day to prepare the treats” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

13. How would you rate “Solution C - contract with a local bakeshop to furnish the baked goods” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

14. How would you rate “Solution D - train one of the kitchen support staff to do the baking and hire a replacement for them” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

15. Which solution is best, based on both workable and practical ratings?
   a. Solution A - tell the residents that they will no longer have the baked treats and deserts
   b. Solution B - force one of the food preparation staff to work overtime every day to prepare the treats
   c. Solution C - contract with a local bakeshop to furnish the baked goods
   d. Solution D - train one of the kitchen support staff to do the baking and hire a replacement for them
Let’s Apply to Environmental Services
Problem Solving - Lesson 5 of 5

Skill Area #1: Generate Problem Solutions

When an Environmental Services worker perceives a problem, they must determine a solution goal. A solution goal identifies what the Environmental Service worker is trying to achieve.

The facility requires that a count of laundry poundage (linens and personal) be done for one week each month. The facility has experienced problems with consistency in the poundage count.

For each statement, decide whether the statement is a solution goal or a possible solution.

1. Contract an outside service for counting the laundry poundage.
   a. solution goal
   b. solution

2. Have all poundage counts “double checked” for accuracy by a coworker.
   a. solution goal
   b. solution

3. Provide training to staff in the procedures for counting laundry poundage.
   a. solution goal
   b. solution

4. All Environmental Services workers will be able to count laundry poundage correctly.
   a. solution goal
   b. solution

5. All shifts will be staffed with someone able to count laundry poundage correctly.
   a. solution goal
   b. solution
Skill Area #2: Rate and Rank Solutions

When Environmental Services workers have several possible solutions to a problem, they must compare the solutions. One way to compare them is by listing the pros (good things) and the cons (bad things) about each solution.

Below are three possible solutions to the problem concerning counting of laundry poundage.

Solution A - Coworker double checks counts  
Solution B - Provide training to staff  
Solution C - Contract outside service

6. What is the most important “pro” for Solution A - Coworker double checks counts?
   a. provide more consistent/accurate counts  
   b. reduce stress from worker for sole responsibility  
   c. make supervisor happy

7. What is the most important “con” for Solution A - Coworker double checks counts?
   a. unhappy coworker assuming more responsibility  
   b. coworker would be detained from other job responsibility and some important work goes uncompleted  
   c. coworker may make mistakes also

8. What is the most important “pro” for Solution B - Provide training to staff?
   a. staff knowledgeable in proper process  
   b. trained personnel in event of absences  
   c. coworkers can assist each other

9. What is the most important “con” for Solution B - Provide training to staff?
   a. training would take too long  
   b. cost incurred may outweigh perceived benefit  
   c. coworkers unhappy about additional training

10. What is the most important “pro” for Solution C - Contract outside service?
    a. responsibility shifts to outside agency  
    b. reduce stress of workers  
    c. provide time for workers to accomplish other tasks
Skill Area #3: Select the Most Appropriate Solution

Sometimes it is hard to pick the best solution to a problem. One simple way is to rate or judge the solutions. You can rate the solution by asking two questions about each solution.

1. Is the solution workable? Can you actually do it?
2. How practical is the solution? A solution is highly practical if it takes a small amount of time, money, or trouble. A solution is not practical if it costs a lot of time and money.

You can put your information in a form like this:

**Rating solutions - counting laundry poundage**

<table>
<thead>
<tr>
<th>Solution</th>
<th>Workable?</th>
<th>Practical?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. contract outside service to count laundry poundage</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>B. have a coworker double check the laundry poundage counts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. provide training in the proper procedures for counting laundry poundage</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>D. leave the current system as is without change</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Now answer the following questions on rating the workable and practical features of solutions.

11. How would you rate “Solution A - contract outside service to count laundry poundage” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

12. How would you rate “Solution B - have a coworker double check the laundry poundage counts” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes
13. How would you rate “Solution C - provide training in the proper procedures for counting laundry poundage” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

14. How would you rate “Solution D - leave the current system as is without change” for workable and practical?
   a. workable - yes; practical - no
   b. workable - no; practical - no
   c. workable - yes; practical - yes
   d. workable - no; practical - yes

15. Which solution is best based on both workable and practical ratings?
   a. Solution A - contract outside service to count laundry poundage
   b. Solution B - have a coworker double check the laundry poundage counts
   c. Solution C - provide training in the proper procedures for counting laundry poundage
   d. Solution D - leave the current system as is without change