PRACTICE EXERCISES FOR PROBLEM SOLVING TEST

PURPOSE
This is provided to help you understand the rules for answering the Problem Solving Test by:
1. Telling you about important features of the test.
2. Giving you suggestions and strategies that can help when you answer it.
3. Giving you practice on questions similar to the actual test.

FEATURES OF PROBLEM SOLVING TEST
There are three types of questions which require critical thinking and analytical skills:

	Number of Questions
Understanding data presented in tables or graphs	23
Understanding written paragraphs	16
Solving math problems	11
	50 Total

You will have 65 minutes to answer the 50 questions. You are allowed to use a calculator, although one is not required. You should use a pencil so you can erase to change an answer. Every question has five possible answers from which you must choose the most correct answer. You will not have to write any essays. You will simply mark ONE of the five answers which will be labeled A, B, C, D, E. During the actual test, you will mark your answers on a special answer sheet separate from the questions. If you mark more than one answer to a question, it will NOT be counted as correct. If you change an answer, it is important to erase your first answer so it does not appear that you have marked more than one answer.

SCORING
Each correct answer adds one point to your score. Points are NOT taken off if you mark an incorrect answer. You should try to score as many points as you can.

SUGGESTIONS TO GET BEST RESULTS

Recent research has indicated that the following practices can lead to better scores on Problem Solving Tests, including some you *should* do, and some you should *not* do.

   Things you should do to score well on a Problem Solving Test:
   - Determine clearly the nature of the question before looking at the answer choices.
   - Work as fast as possible with reasonable assurance of accuracy: do not lose time on a question you do not understand.
   - Eliminate answers from consideration that you know are incorrect and choose from among the remaining answers.
   - Mark an answer to every question, even if you have to guess.
   - Use time remaining after completion of the test to reconsider answers.

   Things you should not do in answering a Problem Solving Test:
   - Do not read slowly and carefully through the entire test before you start working.
   - Do not spend time verifying questions you have already answered until you have answered every question.
   - Do not spend time considering an answer that is not one of the five answer choices.

PRACTICE QUESTIONS

Here is an example question with the correct answer marked as it should be on the answer sheet:

EXAMPLE QUESTION

ANSWER SHEET

1. (A) (B) EMBED MSDraw * mergeformat ●
(D) (E)

1. A truck travels at the rate of 80 kilometers per hour. How much distance will it travel in 30 minutes?

   A. 80 kilometers
   B. 240 kilometers
   C. 40 kilometers
   D. 30 kilometers
   E. None of the above

EXAMPLE EXPLANATION

30 minutes is one half of an hour, so a truck going 80 kilometers per hour will travel 40 kilometers in half an hour.

Answer C is colored in to indicate the correct answer.

You will now have 25 questions to do as practice. Try to answer all of the questions in 30 minutes. Try to get the best score you can by practicing the suggestions to skip a question, or to guess, to save time.

When you are ready, go to the next page and answer the practice questions as quickly as you can.

Write the time when you start below. When you are finished, write the time below and determine the total amount of time used. This will give you an idea of whether you are working as quickly as you will need to do on the actual test.

Time when you started: _____

Time when you finished: _____

Total time taken: _____

Compare to 30 minutes

PRACTICE QUESTIONS

Mark your answers on the attached ANSWER SHEET.

TABLE 1

AMOUNT OF INCOME IN CERTAIN INDUSTRIES (in billions of dollars)					
INDUSTRY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Agriculture	22	26	26	30	51
Communication	14	17	18	20	21
Construction	36	43	47	52	57
Finance and Real Estate	78	90	100	108	118
Manufacturing	213	218	226	253	287
Transportation	27	30	33	36	40

1. Which industry had the largest increase in the dollar amount of income from Year 1 to Year 2?

   A. Agriculture
   B. Construction
   C. Finance and Real Estate
   D. Manufacturing
   E. Transportation

2. Which industry had the smallest increase in the dollar amount of income from Year 1 to Year 5?

   A. Agriculture
   B. Construction
   C. Finance and Real Estate
   D. Manufacturing
   E. Transportation

3. Which industry experienced the largest percentage increase from Year 3 to Year 4?

   A. Agriculture
   B. Communication
   C. Construction
   D. Finance and Real Estate
   E. Manufacturing

4. Which industry experienced the least percent change from Year 1 to Year 4?

   A. Agriculture
   B. Communication
   C. Construction
   D. Manufacturing
   E. Transportation

5. For which industry was there the least consistent increase in income over the period of time covered by the table?

   A. Agriculture
   B. Construction
   C. Finance and Real Estate
   D. Manufacturing
   E. Transportation

GO ON TO THE NEXT PAGE.

TABLE 1 (REPEATED)

AMOUNT OF INCOME IN CERTAIN INDUSTRIES (in billions of dollars)					
INDUSTRY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Agriculture	22	26	26	30	51
Communication	14	17	18	20	21
Construction	36	43	47	52	57
Finance and Real Estate	78	90	100	108	118
Manufacturing	213	218	226	253	287
Transportation	27	30	33	36	40

6. If the trend in the Transportation industry were to continue, its income for Year 6 would most likely be about

  A. 42 billion dollars
  B. 44 billion dollars
  C. 46 billion dollars
  D. 48 billion dollars
  E. 50 billion dollars

7. In which of the following instances has the first type of industry named consistently had an income about half that of the second?

  A. Agriculture; Finance and Real Estate
  B. Communication; Agriculture
  C. Construction; Finance and Real Estate
  D. Finance and Real Estate; Manufacturing
  E. Transportation; Communication

8. In how many instances did a type of industry make a gain of 10% or more over the previous year listed?

  A. 1 - 4
  B. 5 - 8
  C. 9 - 12
  D. 13 - 16
  E. 17 - 20

9. The type of industry showing the steadiest rate of growth in income during this period was

  A. Communication
  B. Construction
  C. Finance and Real Estate
  D. Manufacturing
  E. Transportation

10. In which one of the following groups did all three types of industry increase their respective incomes by most nearly one-third from Year 1 to Year 3?

  A. Agriculture; Communication; Transportation
  B. Agriculture; Communication; Construction
  C. Communication; Construction; Transportation
  D. Construction; Finance and Real Estate, Transportation
  E. Communication; Construction; Finance and Real Estate

11. How many industries had a growth rate of at least 20% from Year 1 to Year 3?

  A. 1
  B. 2
  C. 3
  D. 4
  E. 5

12. Among the following, the greatest percentage increase in income occurred for

  A. Agriculture between Year 3 and Year 4
  B. Communication between Year 2 and Year 3
  C. Construction between Year 1 and Year 2
  D. Finance and Real Estate between Year 4 and Year 5
  E. Manufacturing between Year 3 and Year 4

GO ON TO THE NEXT PAGE.

Read this page and then answer the questions on the next page. You may read any part of this again while you are answering the questions.

1   A personnel department should
2   first of all think of itself as a
3   research group. The research I am
4   thinking of is a questioning of
5   personnel techniques, a re-
6   examining of accepted procedures.
7   It is searching for facts and
8   anticipating future developments.
9   It is thinking about your job and
10   exploring new ways of carrying it
11   out.

12   Secondly, a personnel depart-
13   ment should equip itself with the
14   knowledge and experience which will
15   enable it to advise top management
16   on personnel policies and, when
17   appropriate, to draw management's
18   attention to the employee relations
19   implications of contemplated
20   courses of action.

21   Third, personnel people should
22   work closely with line management
23   in developing guidelines and proce-
24   dures which will help the operating
25   people carry out their responsibil-
26   ities in the employee relations
27   area. Such guides will put the
28   specialized skills which personnel
29   people have at the disposal of the
30   line managers without removing the
31   essential day-to-day contact they
32   should have with their own people.

33   Finally, the personnel depart-
34   ment should perform a review or
35   survey function. Are personnel
36   policies and programs being admin-
37   istered correctly? Are there
38   particular problems which make
39   modifications necessary? Are the
40   programs accomplishing what they
41   were intended to accomplish?
42   Should changes be made to strength-
43   en them? These are some important
44   questions that a review function
45   can help answer.

13. Which two personnel functions described in the passage appear to have the most in common?

    A.   Research and advisory
    B.   Research and review
    C.   Advisory and review
    D.   Procedure and review
    E.   Research and procedure

14. "they" in line 31 refers most clearly to

    A.   "personnel department" in lines 12-13
    B.   "top management" in line 15
    C.   "guidelines and procedures" in lines 23-24
    D.   "personnel people" in lines 28-29
    E.   "line managers" in line 30

15. The questions posed in the last paragraph are ones which are to be answered primarily through

    A.   foreseeing possible developments
    B.   effective communication with employees
    C.   critical evaluation
    D.   conscientious application of policies
    E.   provision of flexibility in approaches

16. Why does the author regard the day-to-day contact referred to in line 31 as "essential"?

    A.   This is needed to search for facts and anticipate developments.
    B.   This is important for advising top management.
    C.   This forms the basis for developing guidelines and procedures.
    D.   This is basic for knowing that policies and programs are administered properly.
    E.   The author does not clearly say why.

17. In line 27, the function of the sentence beginning "Such guides..." is that of

    A.   providing a rationale.
    B.   emphasizing a point.
    C.   indicating an analogy.
    D.   adding details.
    E.   presenting evidence.

18. All of the following are clearly indicated by the author as important for a personnel department to be effective except

    A.   looking ahead to see what will be needed in the future.
    B.   seeking to find new and better ways for handling personnel matters.
    C.   giving counsel to high-level managers on matters of personnel policy.
    D.   having day-to-day contacts with people in the various line departments.
    E.   looking for new ways to make one's job more effective.

19. The main point of the first paragraph is that members of a personnel department should

    A.   think about their jobs so they become as productive as possible.
    B.   have a certain kind of orientation in their work.
    C.   produce facts rather than rely on hunches.
    D.   re-examine accepted personnel techniques and procedures.
    E.   emphasize anticipation of future developments.

GO ON TO THE NEXT PAGE.

20. The normal selling price of a case of soap is $10.00. During a special sale, the price was reduced by 10%. (Note: 10% means 10 percent.) This sale price was 20% greater than the cost to produce a case of soap. How much did it cost to produce a case of soap?

   A. $9.00
   B. $8.00
   C. $7.50
   D. $7.00
   E. $6.50

21. A picture on a page was reduced on a copier to 60% of its original size, and this copy was then reduced by 20%. What percent of the size of the original picture was the final copy?

   A.   12
   B.   20
   C.   40
   D.   48
   E.   52

22. In a certain department, 15% of the females and 25% of the males are working on a project. 60% of the department is female. What percent of the department is working on the project?

   A.   12
   B.   19
   C.   40
   D.   48
   E.   One cannot tell from the information given.

23. The total cost for five items of repair work on a car was $195. Overhaul of the carburetor cost twice as much as the tune-up, brake pads cost one-third as much as the carburetor overhaul, and alignment and wheel balancing each cost one-third as much as the tune-up. What did the tune-up cost?

   A. $30
   B. $45
   C. $60
   D. $90
   E.   One cannot tell from the information given.

24. A certain preparation consists of liquids x, y, and z in the proportion 5:2:1. How many gallons of the preparation can be made from a stock of materials consisting of 25 gallons of x, 20 gallons of y, and 8 gallons of z?

   A.   25
   B.   40
   C.   80
   D.   53
   E.   50

25. A product costing 60 cents per unit to produce had been selling at the average rate of 1,200,000 units per month. After the product was improved, sales increased to an average of 2,000,000 units per month. However, the new product cost five percent more to produce. If the manufacturer's selling price in each instance was 75 cents per unit, what was the manufacturer's added profit per month with the newer product?

   A. $20,000
   B. $60,000
   C. $200,000
   D. $240,000
   E.   One cannot tell from the information given.

ANSWER SHEET

EXERCISES FOR THE PROBLEM SOLVING TEST

1. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   14. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

2. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   15. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

3. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   16. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

4. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   17. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

5. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   18. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

6. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   19. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

7. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   20. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

8. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   21. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

9. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   22. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

10. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   23. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

11. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   24. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

12. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   25. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

13. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

ANASWERS

EXERCISES FOR THE PROBLEM SOLVING TEST

1. (A) (B) **C** (D) (E)
2. (A) (B) (C) (D) **E**
3. ● (B) (C) (D) (E)
4. (A) (B) (C) **D** (E)
5. ● (B) (C) (D) (E)
6. (A) **B** (C) (D) (E)
7. (A) (B) **C** (D) (E)
8. (A) (B) (C) **D** (E)
9. (A) (B) (C) (D) **E**
10. (A) (B) (C) (D) **E**
11. (A) (B) (C) ● (E)
12. (A) (B) **C** (D) (E)
13. (A) **B** (C) (D) (E)
14. (A) (B) (C) (D) **E**
15. (A) (B) **C** (D) (E)
16. (A) (B) (C) (D) **E**
17. ● (B) (C) (D) (E)
18. (A) (B) (C) **D** (E)
19. (A) **B** (C) (D) (E)
20. (A) (B) **C** (D) (E)
21. (A) (B) (C) **D** (E)
22. (A) **B** (C) (D) (E)
23. (A) **B** (C) (D) (E)
24. (A) **B** (C) (D) (E)
25. (A) **B** (C) (D) (E)