# **Problem on the Beltline Exercise**

Problem Booklet

# Instructions

Read the problem described on the next page. Then answer the eight questions. Do them one at a time. Don't jump ahead, but you may look back to earlier questions and your answers. Some questions direct you to choose only ONE answer unless you are told to "Try again!" Other questions tell you to select as MANY answers as you think are correct. Follow the directions for each question.

After you have selected your choice(s) to a question, look up the letter for that choice on the answer sheet. Select your answer to each question by rubbing the developing pen between the brackets on the answer sheet. A hidden message will appear and tell you if you are right. When you have finished, you will learn how to score your performance.

# **Problem on the Beltline Exercise**

# **Background**

The 17-degree mine slope is 825 ft. long.

The conveyor belt drive has broken down.

You are an electrician, trained in basic first aid and CPR.

J.J. Johnson, a cutting machine operator, is 52 years old.

He has a heart condition and carries nitroglycerin tablets.

There is one miner at the surface.

An ambulance and two EMTs are 10 minutes away at the company training center.

#### **Problem**

You and J.J. are walking up the slope to come out of the mine. About 10 feet from the portal J.J. gasps, clutches his chest, and sits down on the floor. After studying Figure 1 turn the page and answer the first question.

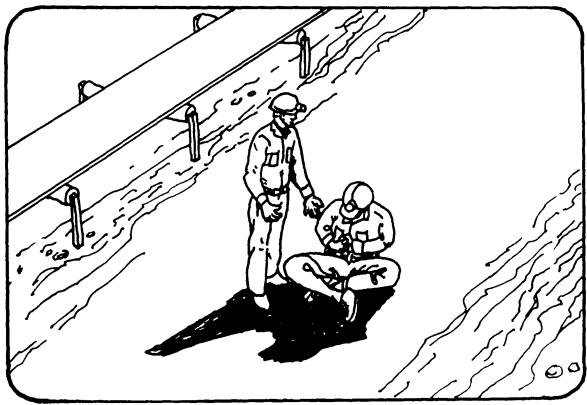


Figure 1: J.J. gasps, clutches his chest, and sits down

# **Question A**

J.J. says "I'm all right. Help me up. I can make it." What should you do now? (Choose only ONE unless you are told to "Try Again!")

- 1. Carry J.J. out on your back.
- 2. Help J.J. walk to the surface.
- 3. Tell J.J. to take it easy and check him for a heart attack.
- 4. Run to the surface and get help.

# **Question B**

You are checking J.J. for a heart attack. What things should you look for? (Select as MANY as you think are correct.)

- 5. Dilated pupils
- 6. Flushing (redness) of the face
- 7. Nausea
- 8. Numbness on one side of the body
- 9. Pain that begins below the left nipple and worsens with a deep breath
- 10. Pain in the center of the chest, shoulder, neck, arms, or jaw
- 11. Sweating
- 12. Trouble breathing

# **Question C**

J.J. says "Let me be," and tries to get up. What should you do now? (Choose only ONE unless you are told to "Try Again!")

- 13. Ask him to rest a minute and swallow one of his nitroglycerin tablets.
- 14. Ask him to rest a minute and then put a nitroglycerin tablet under his tongue.
- 15. If necessary, hold J.J. down to keep him from getting up.
- 16. Run to the surface phone and call the company ambulance.

#### **Question D**

J.J. now says that the pain is gone. What should you do now? (Select as MANY as you think are correct.)

- 17. Have him rest a couple of more minutes before doing anything.
- 18. Tell him to wait. You run to the surface and call the company ambulance.
- 19. Tell J.J. to take another nitroglycerin tablet "for insurance."
- 20. Ask him if he always has chest pain when he exerts himself.
- 21. While J.J. rests, you walk the 10 feet to the portal and yell for help.

# Question E

You check on J.J. again. As you talk with him, he again says he always gets chest pain when he does heavy work. What additional questions should you ask him now? (Select as MANY as you think are correct.)

- 22. "Have you had more chest pain than usual lately?"
- 23. "How many of your family members died from heart attacks?"
- 24. "Is the pain usually this bad when you do heavy work?"
- 25. "Have you ever walked up the slope before?"

# **Question F**

After he rests awhile, J.J. says he can make it the rest of the way. He gets up and starts up the slope. He stops after a few steps, sits down, rubs his chest and says he has had pain again and can't catch his breath. What should you do now? (Select as MANY as you think are correct.)

- 26. Have him sit down with his legs pointing down the slope and help get him into a position he says is comfortable.
- 27. Unbutton his shirt. Put your ear to his chest and listen to his heart.
- 28. Help him put another nitroglycerin tablet under his tongue, as he requests.
- 29. After he rests for a few minutes, get him up. Help him up the slope and get him medical attention.
- 30. Cover him with your jacket, ask him to rest, and reassure him. Tell him that you are going for help and he should stay there. Then go.
- 31. Take J.J.'s pulse and shine your light into his eyes to see if his pupils get smaller.

#### **Question G**

When you get to the mine office you call the company ambulance. You give your name and describe J.J.'s condition and location. You're told that the ambulance will be at the portal in about 10 minutes. Now what should you do? (Choose only ONE unless you are told to "Try Again!")

- 32. Wait at the mine office so you can direct the ambulance to J.J.'s position.
- 33. Go back to J.J. and stay with him.
- 34. Call J.J.'s home and try to notify his wife or family that he is having a heart attack.
- 35. Go look for the miner outside. When you find him, have him help you take care of J.J.

# Question H

When you reach J.J. you find him resting as you left him. He says he feels better. Why is it important to stay with J.J. and not leave him? (Select as MANY as you think are correct.)

- 36. To reassure and calm him.
- 37. To immediately place his head down the slope and his feet uphill to treat him for shock.
- 38. So you can give him CPR in case his heart stops.
- 39. So you can check him and decide when it is O.K. for him, with your help, to climb up the rest of the slope.

# End Of Problem

# Scoring your performance

- 1. Count up the total number of responses you colored in that were marked "correct." Write this number in the blank on the answer sheet.
- 2. Count up the total number of "incorrect" responses you colored in. Subtract this number from 21. Write the difference in the second blank on the answer sheet.
- 3. Add the numbers on the first and second blanks. This is your score.

The best possible score of 39 results from selecting all the correct answers and no wrong answers. The worst possible score of zero results from selecting all the wrong answers and no correct answers.