# MATHEMATICS TEST
## 60 Minutes – 60 Questions

**DIRECTIONS:** Solve each problem, choose the correct answer, and then darken the corresponding oval on your answer sheet.
Do not linger over problems that take too much time. Solve as many as you can; then return to the others in the time you have left for this test.
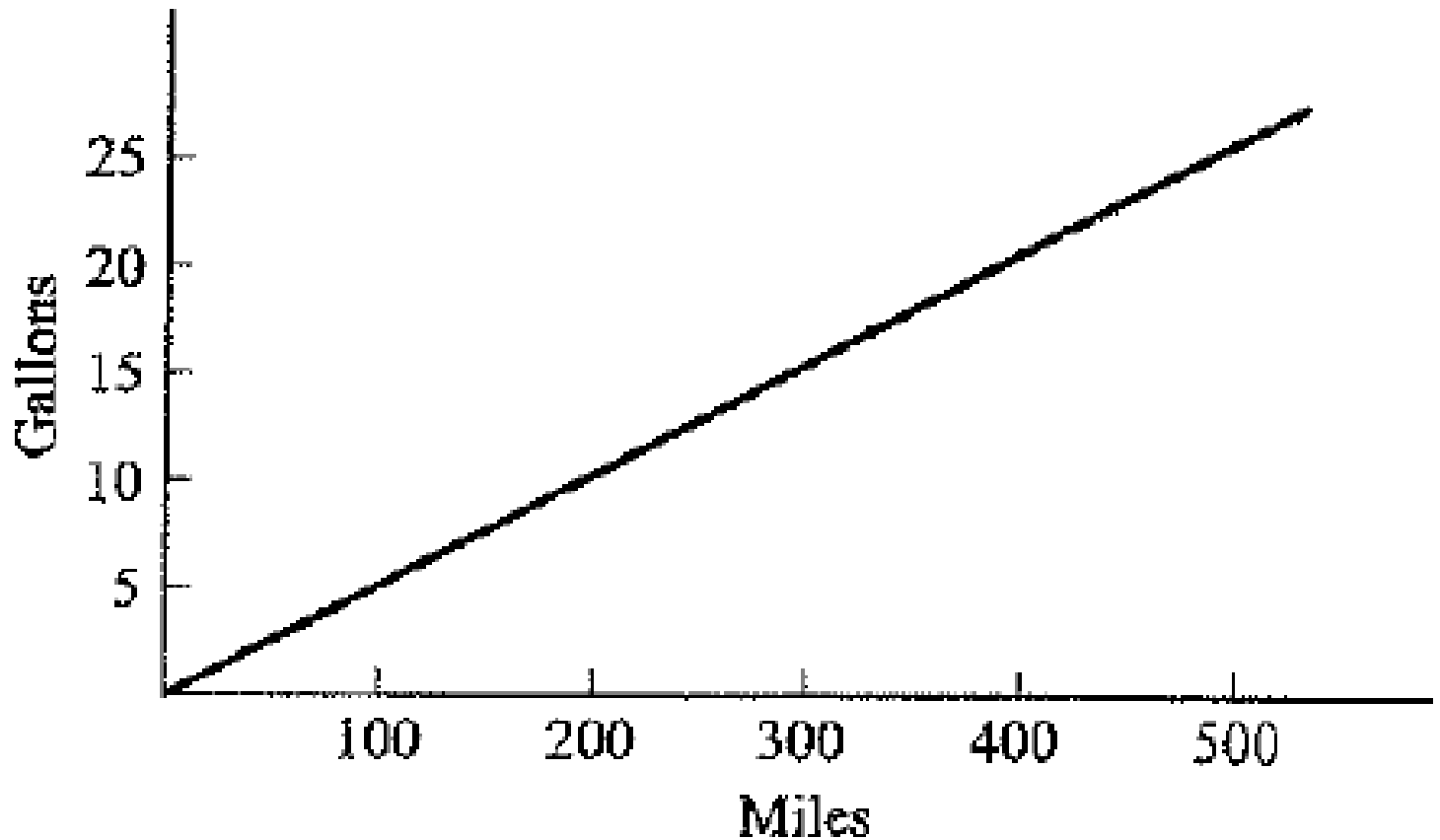You are permitted to use a calculator on this test. You may use your calculator for any problems you choose, but some of the problems may best be done without using a calculator.

**NOTE:** Unless otherwise stated, all of the following should be assumed:

1.  Illustrative figures are NOT necessarily drawn to scale.
2.  Geometric figures lie in a plane.
3.  The word *line* indicates a straight line.
4.  The word *average* indicates arithmetic mean.

3. The line graphed below shows the predicted gasoline use for a certain truck. Which of the following is the closest estimate of this truck's predicted rate of gasoline use, in miles per gallon?

A. 25

B. 20

C. 16

D. 10

E. 8

4. The graph of $y = ax^2 + bx + c$ in the standard (x, y) coordinate plane is shown below. When y = 0, which of the following best describes the solution set for x?

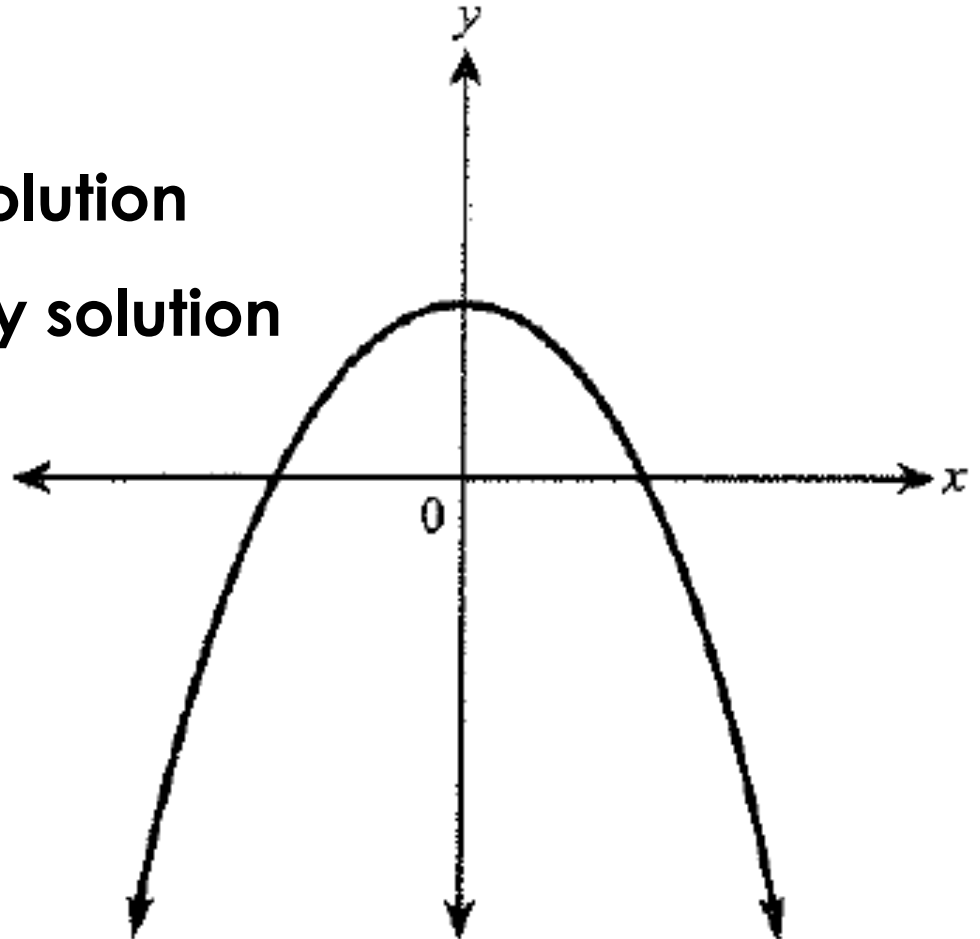F. 2 imaginary solutions

G. 1 double imaginary solution

H. 1 real and 1 imaginary solution

J. 1 double real solution

K. 2 real solutions

# Answers

3. B
4. K