

# **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.

**1. What is the perimeter, in feet, of a rectangle with width 8 feet and length 17 feet?**

**F. 25**

**G. 34**

**H. 50**

**J. 136**

**K. 272**

**2. Passes to the Renaissance Faire cost \$9 when purchased online and \$12 when purchased in person. The group sponsoring the fair would like to make at least \$4,000 from sales of passes. If 240 passes were sold online, what is the minimum number of tickets that must be sold in person in order for the group to meet its goal?**

- A. 153**
- B. 154**
- C. 290**
- D. 334**
- E. 445**

3. For what value of  $q$  is the equation  $\frac{9}{q} = \frac{6}{10}$  true?

F. 3

G. 5

H. 13

J. 15

K. 19

# Answers

1. H
2. B
3. J