

Name:

5-a-day ACT prep #7

Solve each problem, show your work, and then choose the correct answer.

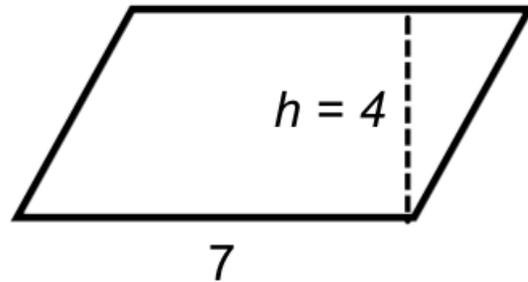
Do not linger over problems that take too much time. Solve as many as you can; then return to the others in the time you have left for this test.

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 area of the parallelogram shown below?



- A. 14
- B. 28
- C. 42
- D. 56
- E. Cannot be determined.

2. What is the slope of a line perpendicular to the line given by the equation $5x + y - 2 = 0$?

- A. -5
- B. $-\frac{2}{5}$
- C. $-\frac{1}{5}$
- D. $\frac{1}{5}$
- E. 5

3. Luna's scores on her first 4 tests were 84, 79, 95, and 93. She takes a 5th test and the average of all 5 scores is 90. What was her score on the 5th test?

- A. 96
- B. 97
- C. 98
- D. 99
- E. Cannot be determined.

4. What is the value of x in the equation $5x + 1 = -5(1 - x)$?

- A. -1
- B. $\frac{2}{5}$
- C. $\frac{3}{5}$
- D. $\frac{5}{3}$
- E. No solution.

5. What is the distance between the points $(-3, 7)$ and $(5, 1)$ rounded to the nearest integer?

- A. 8
- B. 9
- C. 10
- D. 12
- E. 14