Name:

## 5-a-day ACT prep #8

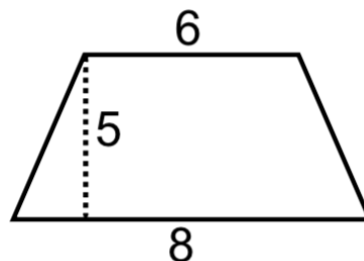Solve each problem, show your work, and then choose the correct answer.

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.

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1. What is the area of the trapezoid shown below?



A. 32.5
B. 35
C. 37.5
D. 40
E. Cannot be determined.

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2. What is the slope of a line containing the points $(-2, 10)$ $and$ $(4, -5)$?

A. $-\frac{5}{2}$

B. $-\frac{5}{6}$

C. $-\frac{2}{5}$

D. $\frac{5}{6}$

E. $\frac{15}{2}$

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3. The ratio of boys to girls in Mr. Chidester's class is 7:5. If there are 10 girls in the class, what is the total number of students in the class?

A. 14
B. 24
C. 31
D. 35
E. None of these

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4. What is the solution to the inequality $-2(x - 4) > -4$?

A. $x < 2$
B. $x > 2$
C. $x < 6$
D. $x > 6$
E. All real numbers.

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5. Mack slept for $1\frac{1}{2}$ hours on Saturday and $2\frac{2}{3}$ hours on Sunday. How much longer did he sleep on Sunday than Saturday?

A. $55\ minutes$
B. $60\ minutes$
C. $65\ minutes$
D. $70\ minutes$
E. $75\ minutes$