Name:

5-a-day ACT prep #1

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. On Friday, Grant Walked $2\frac{1}{3}$ laps during morning recess and $1\frac{1}{2}$ laps during afternoon recess. What is the total number of laps Grant walked in recess on Friday?

A. $3\frac{1}{6}$
B. $3\frac{2}{5}$
C. $3\frac{3}{5}$
D. $3\frac{5}{12}$
E. $3\frac{5}{6}$

2. What is the value of the digit 7 in the number 1.527?

A. $\frac{7}{1000}$
B. $\frac{7}{100}$
C. 7
D. 700
E. $7,000$

3. What is the value of $\sqrt{75} + 2 + \sqrt{27} - 1$?

A. 7
B. $8\sqrt{3} + 1$
C. $\sqrt{102} + 1$
D. 49
E. $\sqrt{107}$

4. What is the value of x in the equation $7x - 5 = 4(x + 1)$?

A. -3
B. -2
C. 0
D. 2
E. 3

5. What is the slope of the line described by the function $7x - 2y = 10$?

A. $-\frac{7}{2}$
B. -2
C. $-\frac{2}{7}$
D. $\frac{7}{2}$
E. 7