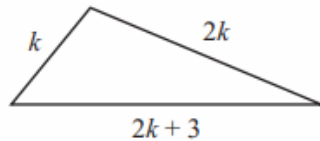


Name.....Period.....

- The dimensions of a triangle, in units, are represented by expressions, as shown in the diagram below.



Which of the following expressions represents the perimeter, in units, of the triangle?

- A.  $4k^3 + 3$
- B.  $5k^3 + 3$
- C.  $4k + 3$
- D.  $5k + 3$

Which of the following is **not** a solution of the equation below?

$$3x(x - 1)(x - 2) = 0$$

- A.  $x = 0$
- B.  $x = 1$
- C.  $x = 2$
- D.  $x = 3$

If  $y \neq 0$ , which of the following is equivalent to the expression below?

$$\frac{15y^9}{5y^3}$$

- A.  $3y^3$
- B.  $3y^6$
- C.  $10y^3$
- D.  $10y^6$

Which of the following is equivalent to the expression below?

$$-2(x - 5)$$

- A.  $-2x - 5$
- B.  $-2x + 5$
- C.  $-2x - 10$
- D.  $-2x + 10$

2.

Hooke's law states that the force needed to stretch a spring varies directly with the length the spring is stretched.

A force of 20 newtons will stretch a spring 5 centimeters. What is the total number of centimeters that a force of 60 newtons will stretch the same spring?

- A. 15
- B. 20
- C. 100
- D. 240

3.

A linear equation is shown below.

$$y = \frac{2}{5}x + 2$$

What is the value of  $x$  when  $y = 2\frac{2}{3}$ ?

- A.  $3\frac{3}{4}$
- B.  $3\frac{1}{15}$
- C.  $1\frac{2}{3}$
- D.  $1\frac{1}{9}$

4.

One solution of the quadratic equation below is  $x = -2$ .

$$x^2 + 3x + 2 = 0$$

What is the other solution of the quadratic equation?