Algebra Review #28 ***SHOW HOW YOU SOLVED EACH PROBLEM***

NAME _____

1. Which expression correctly represents $3 less than twice the cost, c?

A $3 - 2c$
B $3 - 2 + c$
C $2c - 3$
D $\frac{c}{2} - 3$

2.

What is the value of

$$\frac{mn}{r^2}$$

if m = 7, n = 18, and r = 6?

a. 3.5
b. 10.5
c. 21
d. 63

3. What is the slope of the equation?

$$-2y = x - 1$$

4. Which is an equation for the line that contains the points (-3,5) and (1,-3)?

a. $y = -x + 2$
b. $y = -2x - 1$
c. $y = -\frac{1}{2}x - \frac{3}{2}$
d. $y = \frac{3}{2}x - \frac{9}{2}$

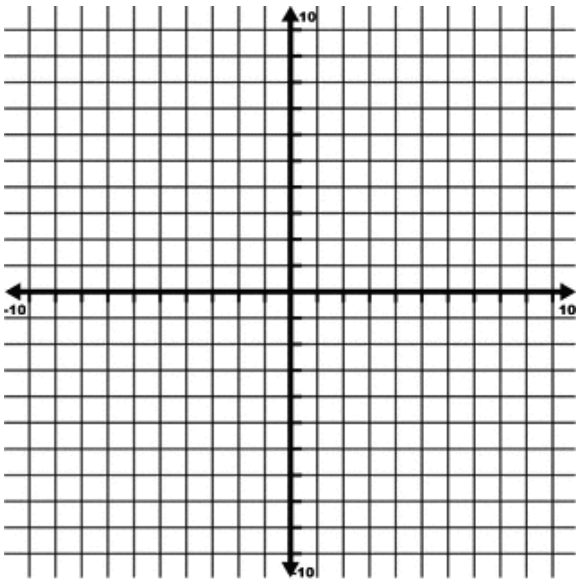
5. Which set of ordered pairs is a function?

a. $\{(-6,12),(1,8),(1,13)\}$
b. $\{(0,2),(0,4),(4,0)\}$
c. $\{(7,-1),(7,-2),(7,-3)\}$
d. $\{(1,3),(2,4),(3,5)\}$

6. Draw a graph of the equation

$$y + 1 = 3x$$

Slope:_____ Y-intercept:_____



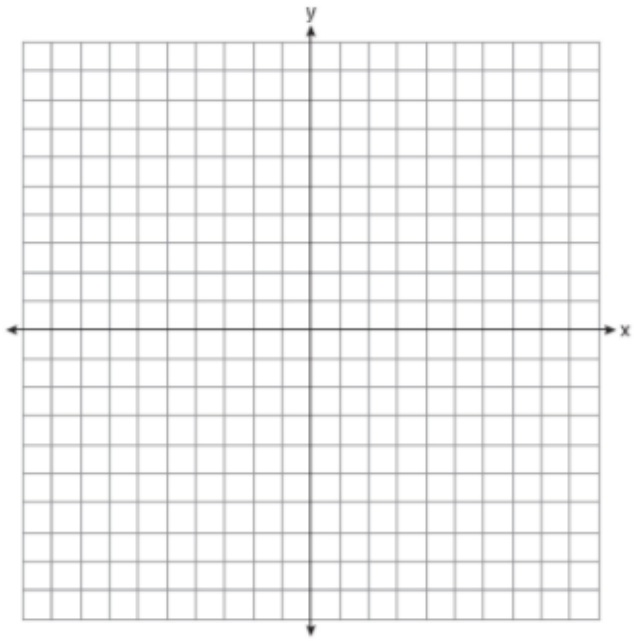
7. What is the value of the following in simplest form?

$$9\sqrt{18} - 2\sqrt{50}$$

8. Graph the following system of inequalities:

$$2x - y \geq 6$$

$$x > 2$$



Is (3,0) a solution to this system? YES or NO

Is (2,-3) a solution to this system? YES or NO

9. If y varies directly with x and the constant of variation is 9, which equation represents this relationship?

A $y = 9x$
B $y = \frac{9}{x}$
C $y = \frac{x}{9}$
D $y = -9x$

10. Solve this system of equations:

$$\begin{cases} y = 4x + 2 \\ y = x - 1 \end{cases}$$

A (-1,2)
B (-1,-2)
C (1,-2)
D (1,2)