Algebra Review #20 ***SHOW HOW YOU SOLVED EACH PROBLEM***

NAME _____

1. Solve the following if x = 4 and y = -3

$$2\sqrt{x} + y^2 - y$$

2. If f(x) = |x – 5| , find the range if the domain is {3,4,5,6,7}.

3. Tell whether the equation has one has one, none, or infinite solutions:

$$3x + 5 = 4x - 9$$

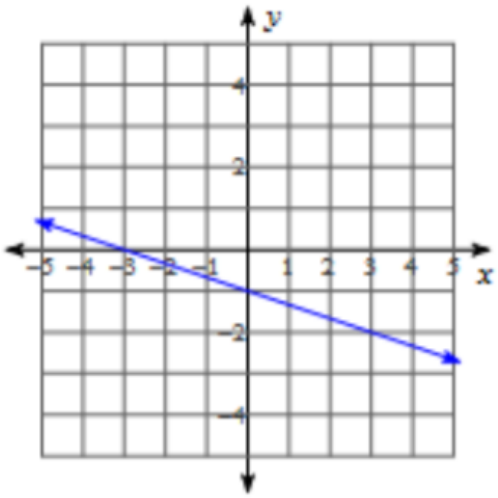
4. Find the slope of the line which passes through (0,5) and (-1,4).

5. Find the slope and the y-intercept from the following equation (remember, the equation must be in y=mx+b form).

$$8x - 2y = 12$$

Slope:_____ Y-intercept:_____

6. Observe the following graph.



Is the following graph a function?

What is the domain?

What is the range?

What is the slope?

What is the y-intercept?

What is the equation of this line?

7. What is the value of the following:

$$-2\sqrt{80} + 4\sqrt{20}$$

8. Simplify the radical.

$$\sqrt[3]{2430ts^8}$$

9. Morgan solved the equation below. Between which two steps did she use the Subtraction Property of Equality?

Morgan's Work

Step 1	$6(x+5)=25$
Step 2	$6(x)+6(5)=25$
Step 3	$6x+30=25$
Step 4	$6x+30-30=25-30$
Step 5	$6x=-5$
Step 6	$\left(\frac{1}{6}\right)6x=\left(\frac{1}{6}\right)(-5)$
Step 7	$x=-\frac{5}{6}$

A Step 1 to Step 2

B Step 2 to Step 3

C Step 3 to Step 4

D Step 6 to Step 7

10. Solve for m.

$$\frac{mn}{2}=7$$