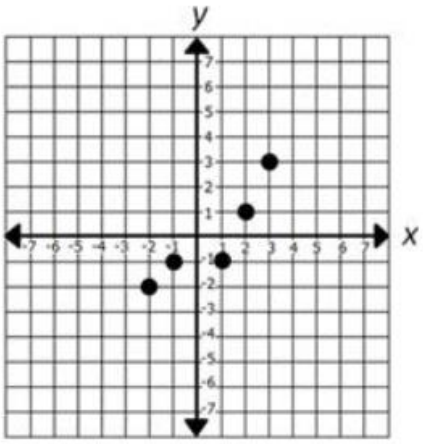
Algebra Review #27 ***SHOW HOW YOU SOLVED EACH PROBLEM***

NAME _____

1. Solve the following equation:

$$5(2x+6) = -4(-5-2x) + 3x$$

2. What is the domain of the following data?



3. Which is the equation for the line that has a slope of 1/3 and a y-intercept of 5?

A y = 3x + 5

B 3y = -9x – 15

C 9y = 3x + 45

D y = $\frac{1}{3}$x – 5

4. What is the slope of a line which passes through (10,-3) and (-5, -3)?

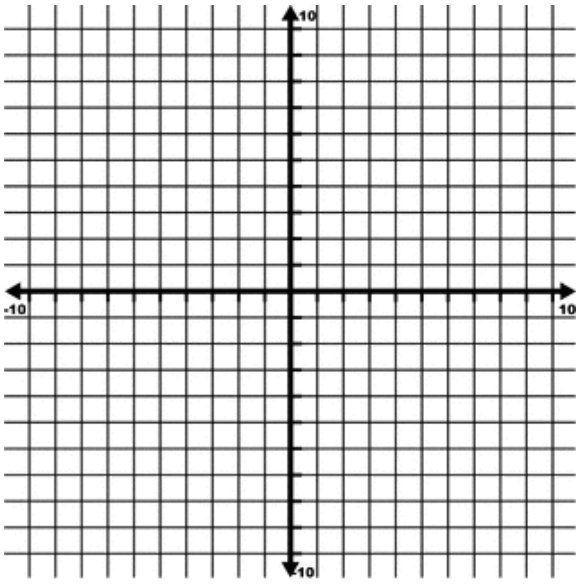
5. Find the slope and the y-intercept from the following equation (remember, the equation must be in y=mx+b form).

$$x - 4y = 12$$

Slope:_____ Y-intercept:_____

6. Draw a graph of the equation

$$y = 0.5x - 1$$



7. What is the value of the following:

$$-2\sqrt{98} + 10\sqrt{50}$$

8. Brian uses a linear regression to model the relationship between cricket chirp rate and temperature shown in the table.

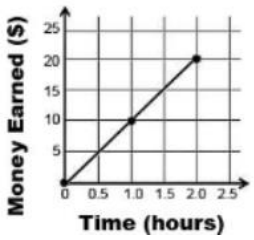
Chirp Rate (chirps/sec)	Temperature (°F)
20	88.6
16.2	83.3
18.4	84.3
15	79.6
17	83.5

Using the modeled equation, he finds the predicted temperature for a chirp rate of 19 chirps per second to be:

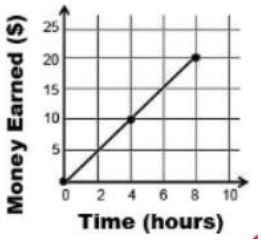
A 86.5°F
B 84.1°F
C 82.7°F
D 87.8°F
E 88.0°F

9. The money Sam earns varies directly with the number of hours she babysits. She earns $50 for five hours. Which graph represents her earnings for the job?

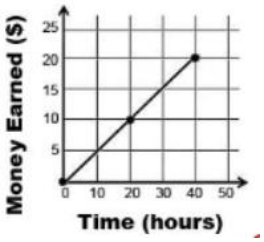
A



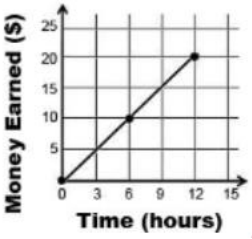
B



C



D



10. The sum of twice a number and 4 times another number is 4. The first number decreased by the second number is 5. Find the numbers. (Write a system of equations and solve).