Name_____ Check-In Activity

Date_____ $y = mx + b$

For the equations below,

a) Identify the slope, and

b) Identify the y-intercept and write it as an ordered pair.

1. $y = 3x - 5$

a) Slope = _____

b) Y-intercept = (___,___)

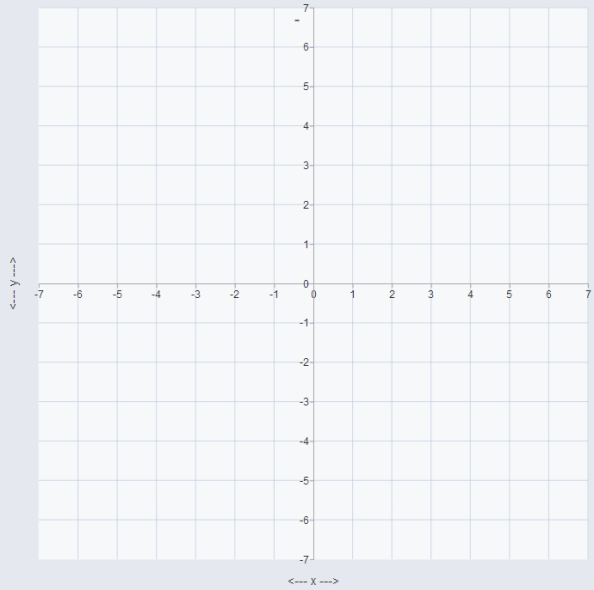
2. $y = \frac{2}{3}x + 1$

a) Slope = _____

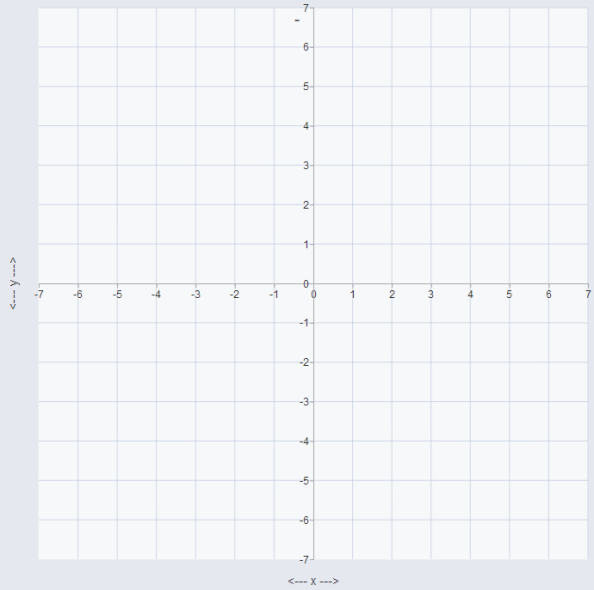
b) Y-intercept = (___,___)

For the equations below, graph the linear relationship on the given x-y axes.

3. $y = -2x + 4$

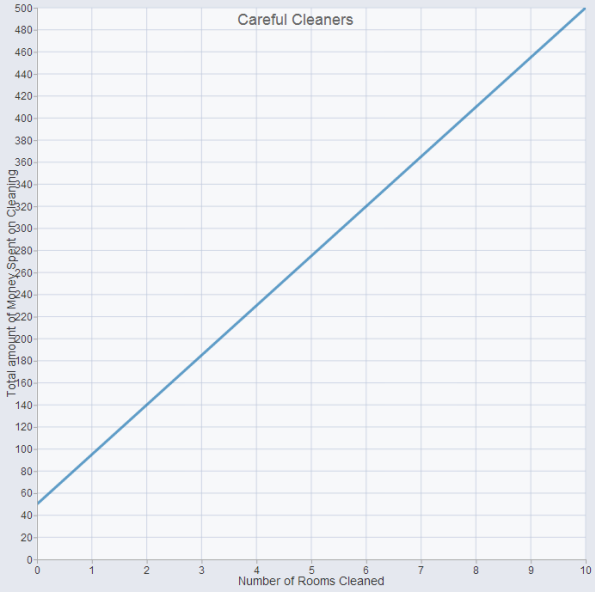


4. $y = \frac{3}{4}x - 3$



For the given situation, answer the following questions.

The Careful Cleaners plan on charging you a base fee of $50 to clean your house, plus an extra $45 per room that they clean. This situation can be modeled by the linear equation $y = 45x + 50$, where x represents the number of rooms you are cleaning and y represents how much it will cost you. Use the graph below to answer the questions on the right.



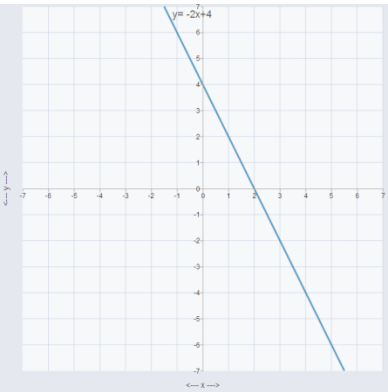
5. How many rooms will the cleaners have to clean for the total cost to be $230?

6. If you have 7 rooms in your house that need cleaning, how much money will you be spending?

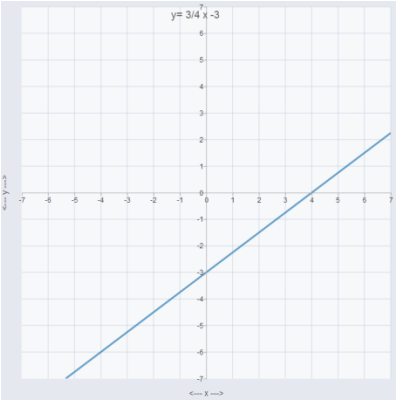
7. Which number is the slope in this situation and why?

Answer Key:

1. a) 3 b) (0,-5)
2. a) $\frac{2}{3}$ b) (0,1)
3.



4.



5. 4 rooms
6. $365
7. 45 is the slope because it is the number attached to x in your equation. It is also the slope because it is the numerical piece of information in your data that is a rate.