

**Do Now**

The taxi company charges \$0.75 per mile driven in addition to a flat fee of \$3.

A) Write an equation to represent the total cost for a taxi cab trip.

Let  $x = \# \text{ of miles}$   
 $y = \text{total cost}$

$m = .75$   
 $b = 3$

$$y = .75x + 3$$

B) How many miles did you travel if you paid \$12.75 for your ride?

$y = .75x + 3$

$y$  value  $\uparrow$

$$12.75 = .75x + 3$$

$$\begin{array}{r} 12.75 = .75x + 3 \\ -3 \phantom{= .75x + 3} \\ \hline 9.75 = .75x \\ \frac{9.75}{.75} = \frac{.75x}{.75} \\ 13 = x \end{array}$$

13 miles

Dec 19-11:17 AM

**Homework Answers**

2) Initial Amount: 50,000 6) Let  $x = \# \text{ of years}$

Decreasing

$y = \text{total miles}$

-2500

$y = 12000x + 23000$

$y = -2500x + 50000$

B) 83,000 miles

4) Let  $x = \# \text{ of prints}$

7) Let  $x = \# \text{ of miles}$

$y = \text{total cost}$

$y = \text{total charges}$

$y = .15x + 2.95$

$y = 0.24x + 19.95$

B) \$40.45

B) \$65.07

5) Let  $x = \# \text{ of rentals}$

8) Let  $x = \# \text{ of months}$

$y = \text{total cost}$

$y = \text{total \$ in account}$

$y = 25x + 395$

$y = 75x + 500$

B) \$695

B) \$650

Nov 17-6:57 AM

## Writing & Graphing Real World Applications

### • Use the same steps to Write an Equation

- > Write a let statement for your variables (x and y)
- > Identify the starting amount (b)
- > Identify the change (m)
- > Write the equation!

### • Set Up Your Graph

- > Label your Axis
- > Choose an Appropriate Scale

### • Graph Your Equation

- > Use Slope Intercept
- > X & Y intercepts
- > Table of Values

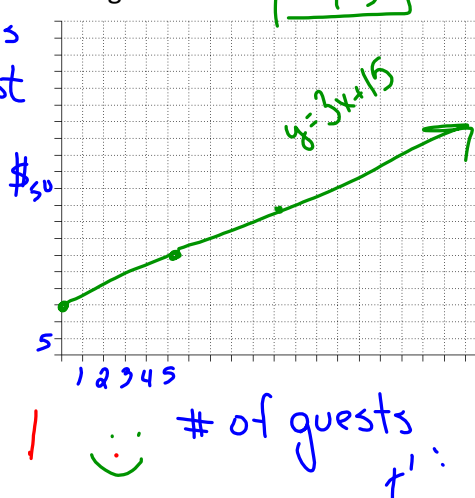
Nov 16-6:46 AM

1) Jackson's birthday party costs \$15, plus an additional \$3 for each guest he invites.

Write an equation to represent Jackson's birthday party so that you could figure out how much it cost for any number of guests, what would it be?

Based on your graph, Determine how much it would cost for Jackson's Birthday if he invites 10 guests.

Let  $x = \#$  of guests  
 $y = \$$  total cost  
 $m = 3$   $b = 15$   
 $y = 3x + 15$



X	Y
0	15
5	30
10	45

Nov 16-5:08 PM