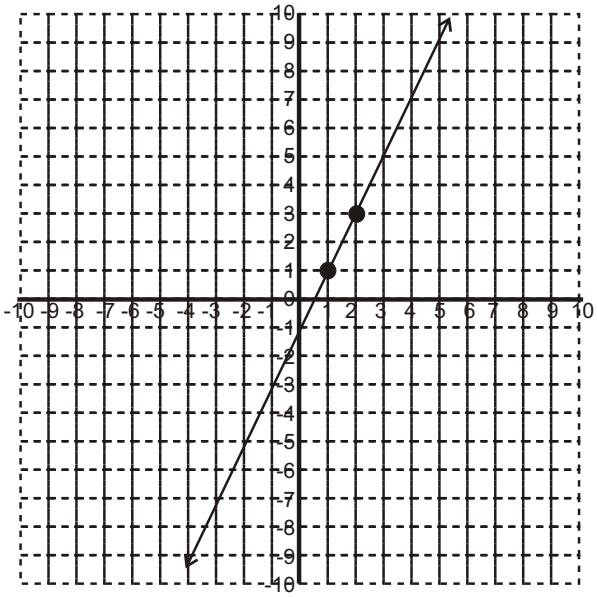
Name_____ Date_____

USING SLOPE-INTERCEPT



Find the equation to the line on the four-quadrant grid. Use the slope-intercept formula to find the equation.

$y=mx+b$

m=slope= $\frac{\text{rise}}{\text{run}} = \frac{\triangle Y}{\triangle X}$

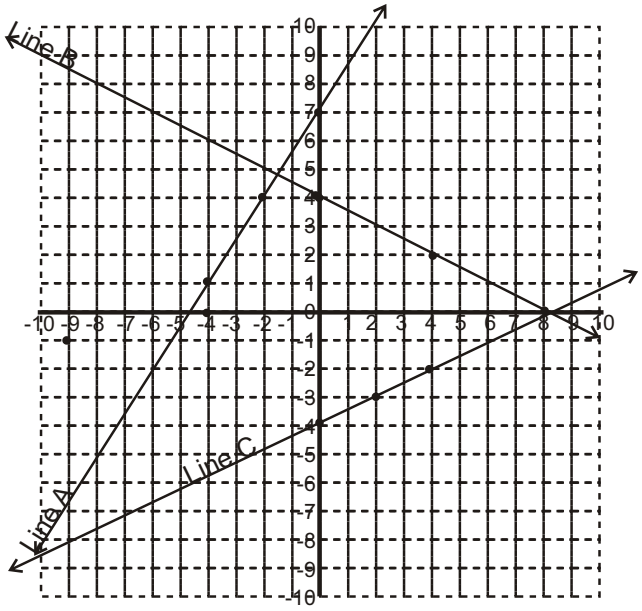
b=y-intercept

To find the slope of a given line, express the slope as a ratio(the rise over run or change in y over change in x).

Locate two points on the line. How much does the y-value change? It changes 2. How much does the x-value change? It changes 1. The slope or the "m" value for this line would be $\frac{2}{1}$.

Next, locate the y-intercept. This is simply where the line crosses the y-axis. notice that the line above crosses the y-axis at -1. For this line, **b=-1**.

When you have your m-value(slope) and your b-value(y-intercept), plug the values into the equation, y=mx+b. **$y=\frac{2}{1}x-1$** ⟷ This is the equation representing the line above.



1) What is the slope of line A? m=_____.

2) What is the y-intercept of line A? b=_____.

3) What is the equation representing line A?

_____

4) What is the slope of line B? m=_____.

5) What is the y-intercept of line B? b=_____.

6) What is the equation representing line B?

_____

7) What is the slope of line C? m=_____.

8) What is the y-intercept of line C? b=_____.

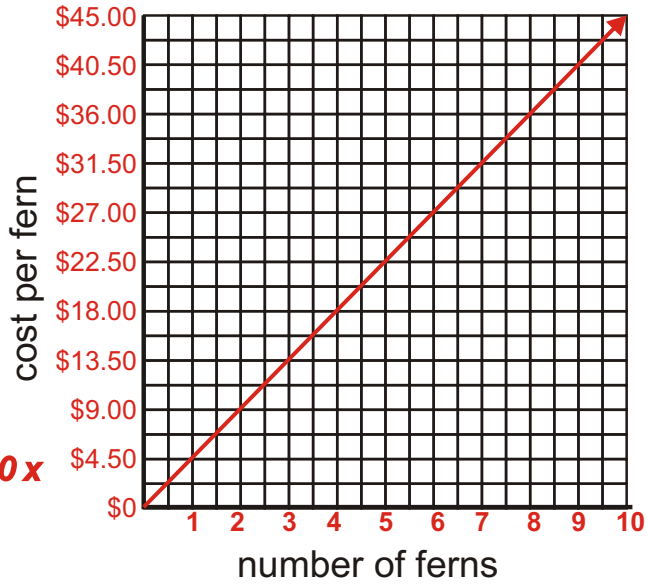
9) What is the equation representing line C?

_____

10) Which of the three lines has a negative slope?_____

Maisonet √Math

1) Fernan "the man" was selling ferns from the back of his van. He sold each fern for $4.50. Make a graph showing the relationship between cost and the number of ferns sold.



*note - there are variations to the way the graph may be set up.

2) What was the equation representing the relationship between cost and number of ferns? *y= $4.50 x + 0 or just* ***y = $4.50 x***

slope

y-intercept

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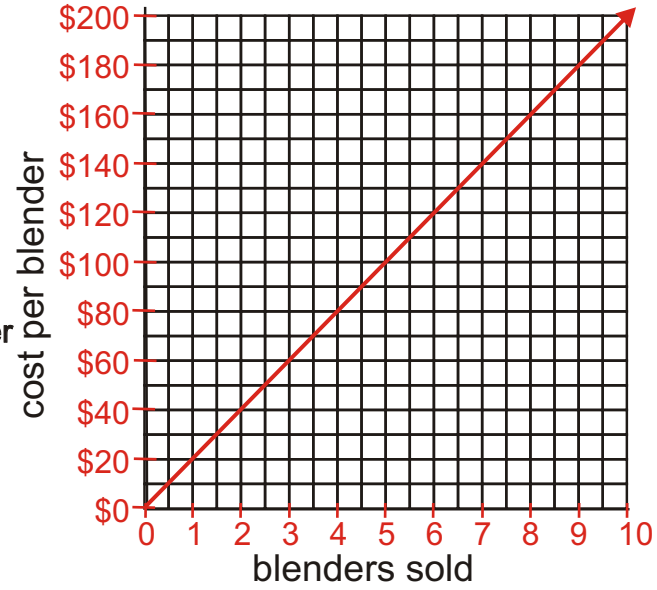
3)Linda was selling blenders that cost $20.00 each. Graph the relationship showing the cost of the blenders as more units are sold.



4) What is the equation representing the relationship between cost and the number of blenders?

y = $20 x

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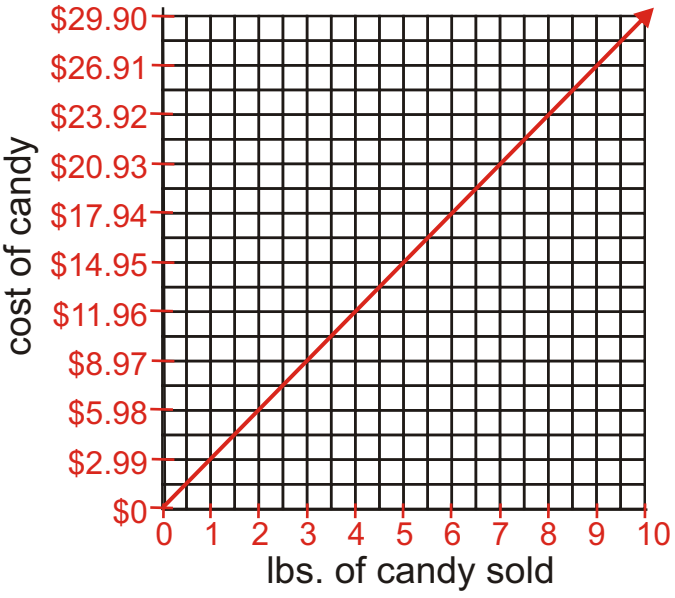
5) Brandy was selling some candy for 2.99 per lb. Graph the relationship between the variables of cost and pounds.



6) What is the equation representing the relationship between cost and pounds?

y= $2.99x