GRAPHING USING A POINT AND A SLOPE

BELL WORK

1. Jason had $87 in his savings account. He then worked for 2 weeks, earning $5.75 per hour, and deposited all the money he earned into his savings account. The account then had a balance of $271. Which method can be used to find the number of hours Jason worked?

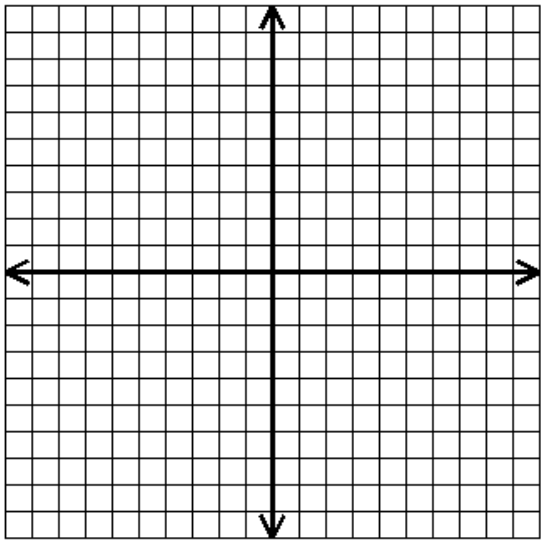
A. Subtract 87 from 271 and then divide the difference by 5.75
B. Subtract 87 from 271 and then multiply the difference by 5.75
C. Add 87 to 271 and then divide the sum by 5.75
D. Add 87 to 271 and then multiply the sum by 5.75

2. A furniture store charges a $150 fee to deliver a piece of furniture weighing up to 200 pounds. The store charges $2 extra for each additional pound over 200. Which equation best represents the total delivery fee, *f*, in terms of the number of pounds, *p*?

A. $f = 150 + 2(p - 200)$
B. $f = 150 + \frac{p - 200}{2}$
C. $f = 150 + (p - 200)$
D. $f = 150 + 2p$

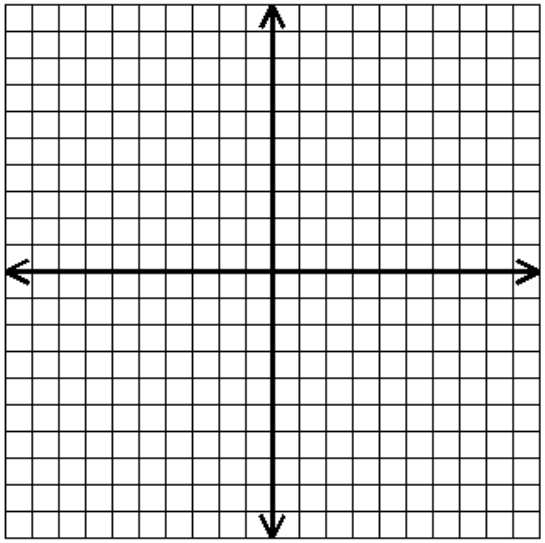
EXAMPLES: Draw a line through the given point with the given slope.

1) Graph the line that passes through point A(-3, 1) and has a slope of $-\frac{4}{3}$



Equation: _____

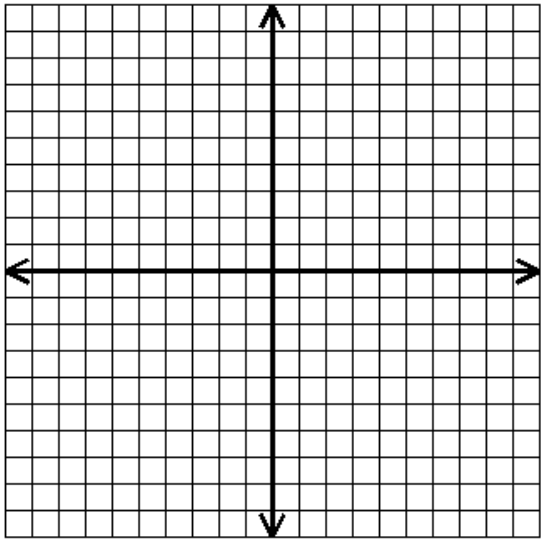
2) A turtle is crawling at a rate of 2 meters per hour and crosses the intersection at (-1, -5). Graph the line and write the equation to represent his path.



Equation: _____

Will the turtle reach the intersection of (6, 9)? _____

3) Janelle graphed a line through (6, -4) and had a slope of $\frac{1}{3}$. Graph and identify the equation that could be used to represent this line.

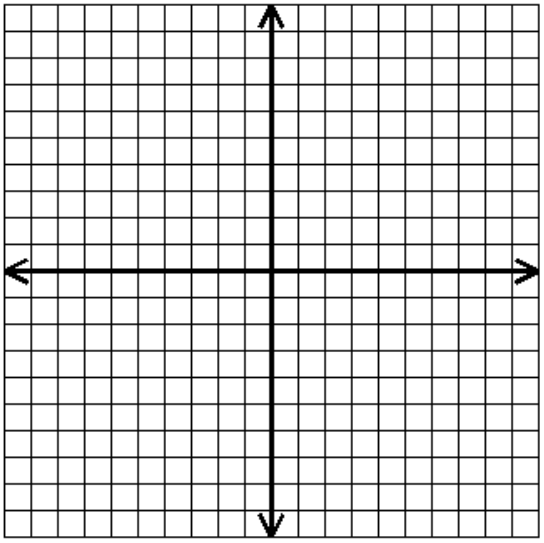


Equation: _____

Does the point (9, -3) lie on this line?_____

Does the point (3, -2) line on this line?_____

4) Kate's house it located at (-4, 5) and Becky's house is located at (8, 2). Graph the line that would represent Kate's straight path if she wanted to jog to Becky's house.



Equation: _____

If Tony's house is located at (4, 3) will Kate pass his house?_____