

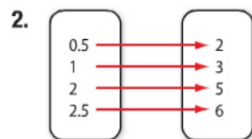
Algebra 2
Review for MCT 2.1-2.4 (Tues.)

Quiz 2.3-2.4 today

State the domain and range of each relation.
Then determine whether each relation is a
function. If it is a function, determine if it is
one-to-one, (Lesson 2-1)

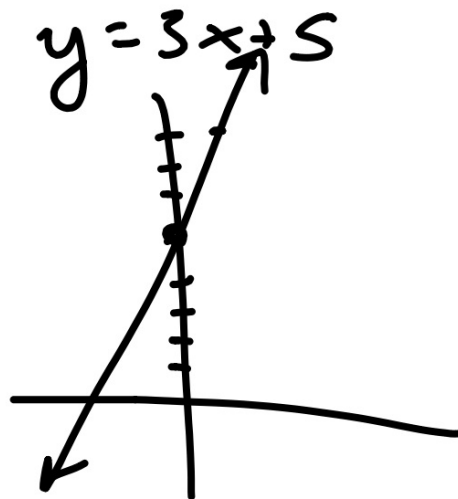
1.

x	y
-2	4
-1	1
2	4
2	6



D: -2, -1, 2

R: 4, 1, 6



Find the x -intercept and y -intercept of the graph of each equation. Then graph the equation using the intercepts. (Lesson 2-2)

3. $y = 3x - 9$

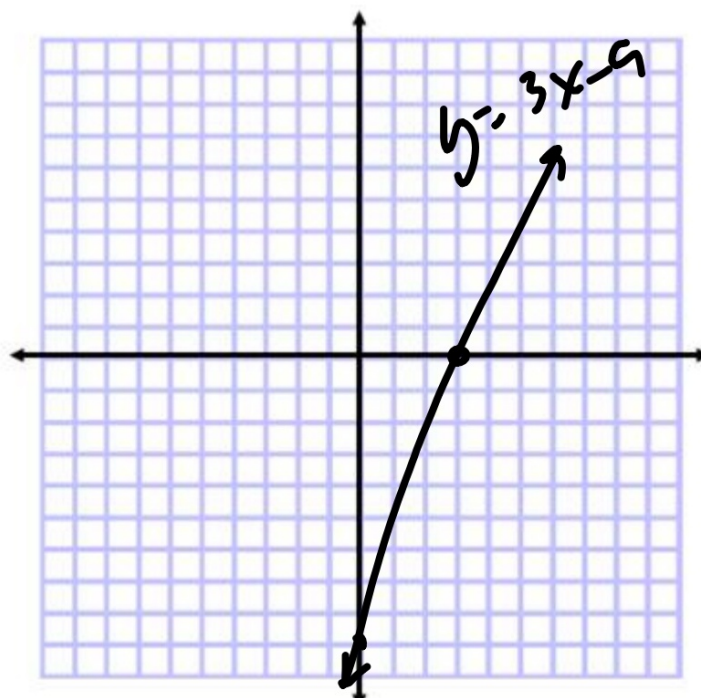
x -int
 $(3, 0)$

4. $2y - 5x = 10$

y -int
 $(0, -5)$

$$\begin{array}{r} 0 = 3x - 9 \\ +9 \quad +9 \\ \hline 9 = 3x \\ \frac{9}{3} = \frac{3x}{3} \end{array}$$

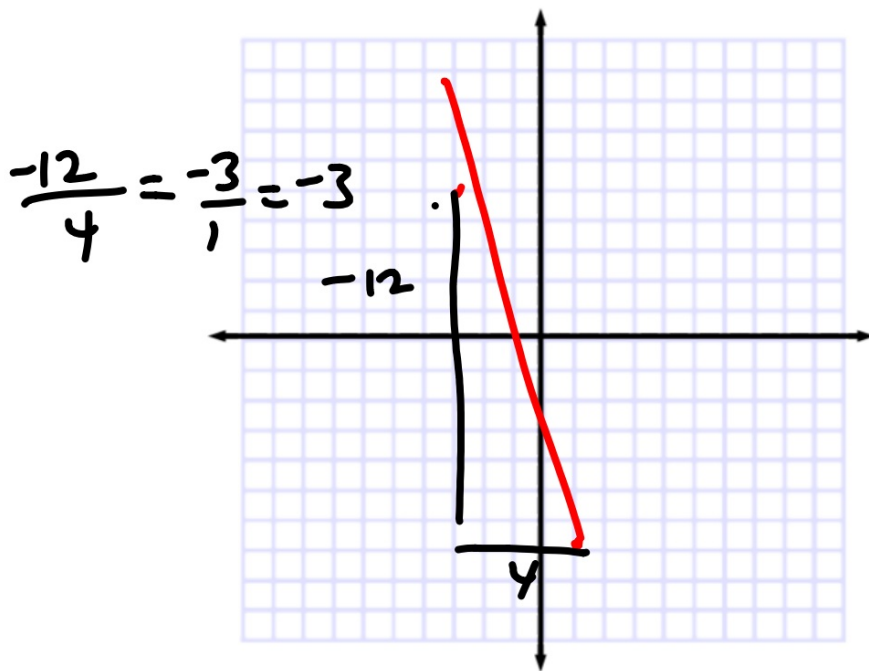
$y = -9$



7. **REPAIR** An auto mechanic charges an initial fee of \$25 plus an hourly fee of \$35. (Lesson 2-2)
- Write an equation to represent the situation.
 - How much did it cost Stacy if the mechanic fixed her car in 3.5 hours?

Find the slope of the line that passes through each pair of points. (Lesson 2-3)

8. $(1, -7), (-3, 5)$



Write an equation of the line passing through each pair of points. (Lesson 2-4)

12. $(-3, -14)$ $(1, -2)$

$$y = mx + b$$

$$m = \frac{-2 - (-14)}{1 - (-3)} = \frac{12}{4} = 3$$

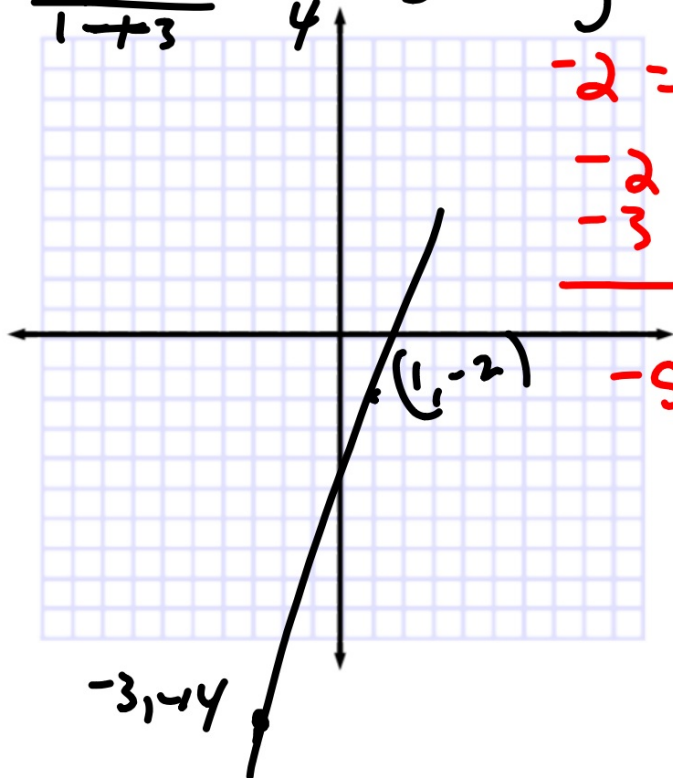
$$y = 3 \cdot x + b$$

$$-2 = 3 \cdot 1 + b$$

$$\begin{array}{r} -2 = 3 + b \\ -3 \quad -3 \end{array}$$

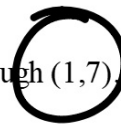
$$-5 = b$$

$$\boxed{y = 3x - 5}$$



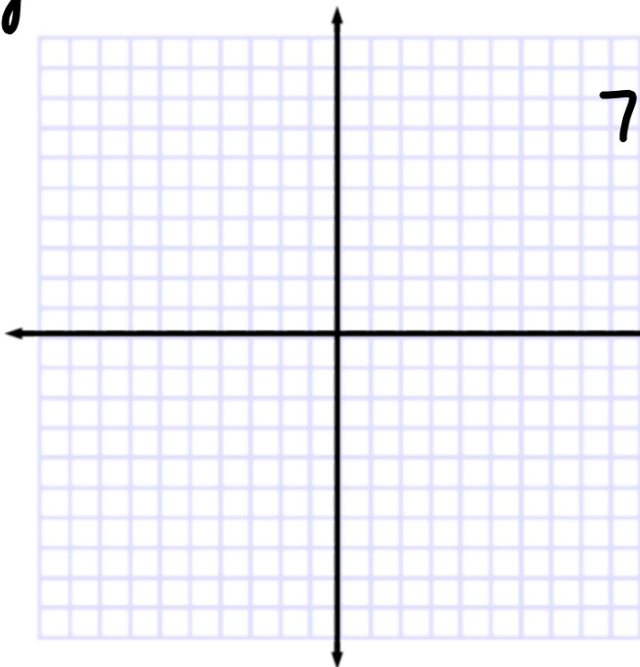
$$y - 7 = 2(x - 1)$$

Write the equation of a line parallel to $y = 2x + 3$ passing through $(1, 7)$.



$$y = 2x + 5$$

$$m = 2$$



$$y = mx + B$$

$$7 = 2 \cdot 1 + B$$

$$7 = 2 + B$$

$$\begin{array}{r} 7 \\ - 2 \\ \hline \end{array}$$

$$B = 5$$

Write the equation of a line perpendicular to $y = -3x + 2$ passing through $(-6, 8)$

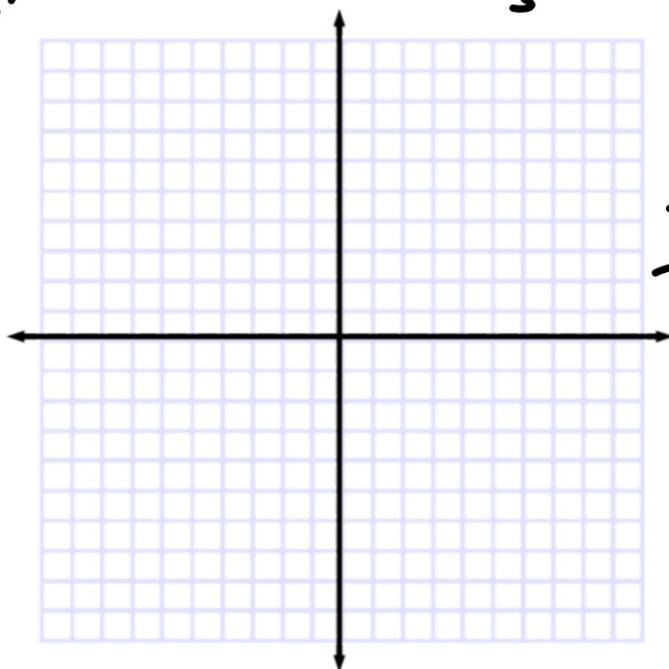
$$y = \frac{1}{3}x + 10$$

$$m = \frac{1}{3}$$

$$8 = \frac{1}{3} \cdot -6 + B$$

$$\begin{array}{r} 8 = -2 + B \\ +2 \quad +2 \end{array}$$

$$\hline 10 = B$$



Write the equation of a line parallel to $y = \textcircled{D} + 2$ passing through $(2,5)$.

