

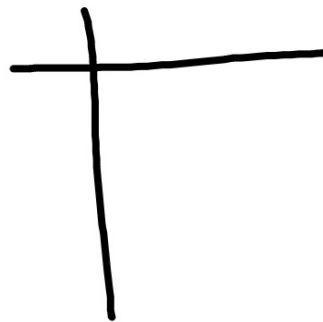
Algebra 1 3.2

Solve linear equations by graphing

Estimate solutions to a linear equation by
graphing

x-int

Equations with no solution :O



linear function

parent function

family of graphs

solution (root) of an equation

zero of a function

activ: whiteboards

Quiz tomorrow 3.1-3.2

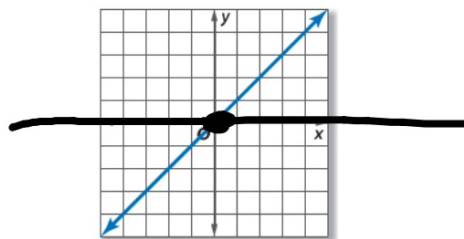
 **KeyConcept** Linear Function

Parent function: $f(x) = x$

Type of graph: line

Domain: all real numbers

Range: all real numbers



$$x = 0$$

Whiteboards

Solve each equation by graphing. Verify your answer algebraically.

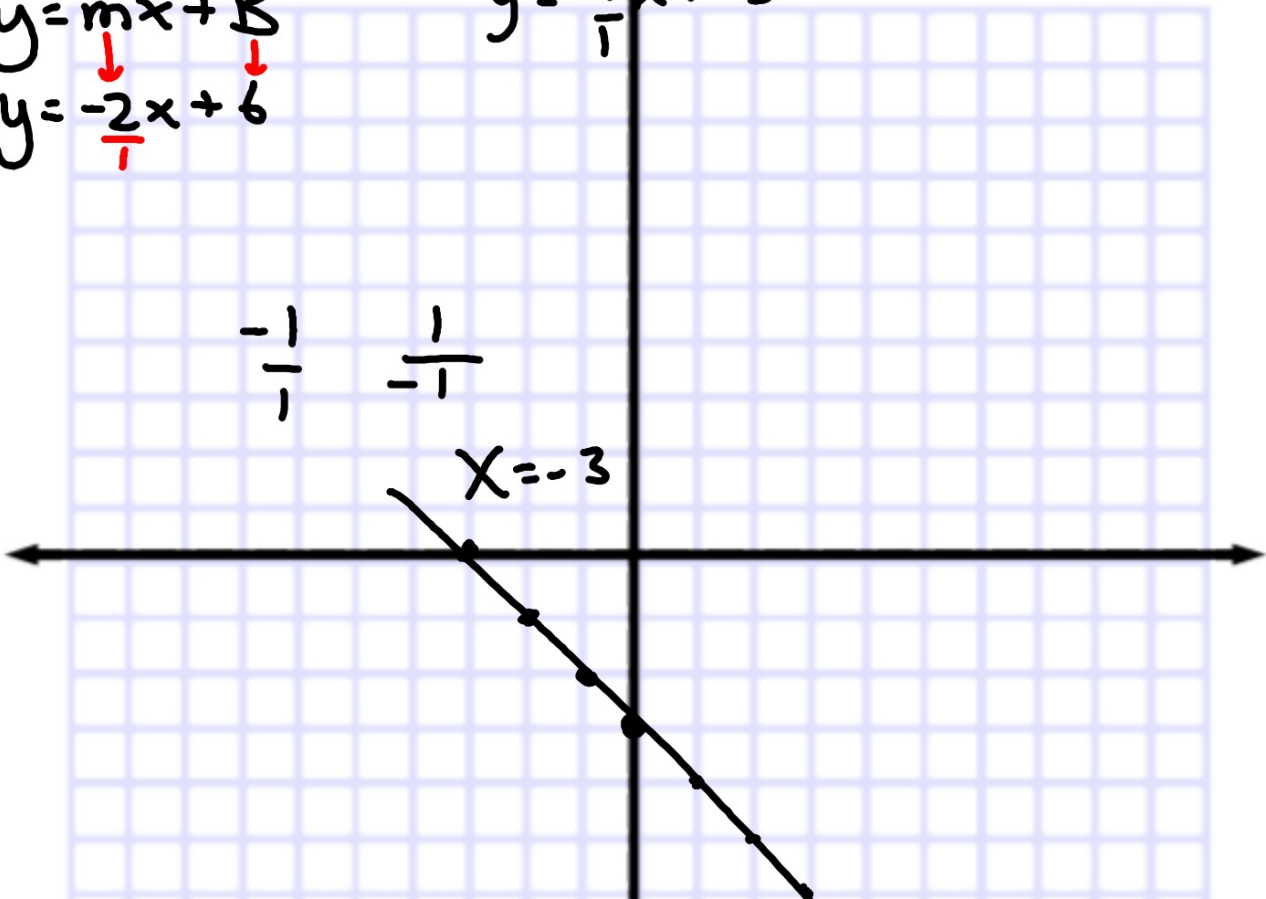
1. $-2x + 6 = 0$

$$y = mx + B$$
$$y = \underline{-2}x + \underline{6}$$

2. $-x - 3 = 0$

$$y = \underline{-1}x + \underline{-3}$$

* Graph the related function



3. $4x - 2 = 0$

$$y = \frac{4x - 2}{1}$$

$7x + 15 = 0$

$$\frac{14}{2} \quad \frac{21}{3} \quad \frac{28}{4}$$

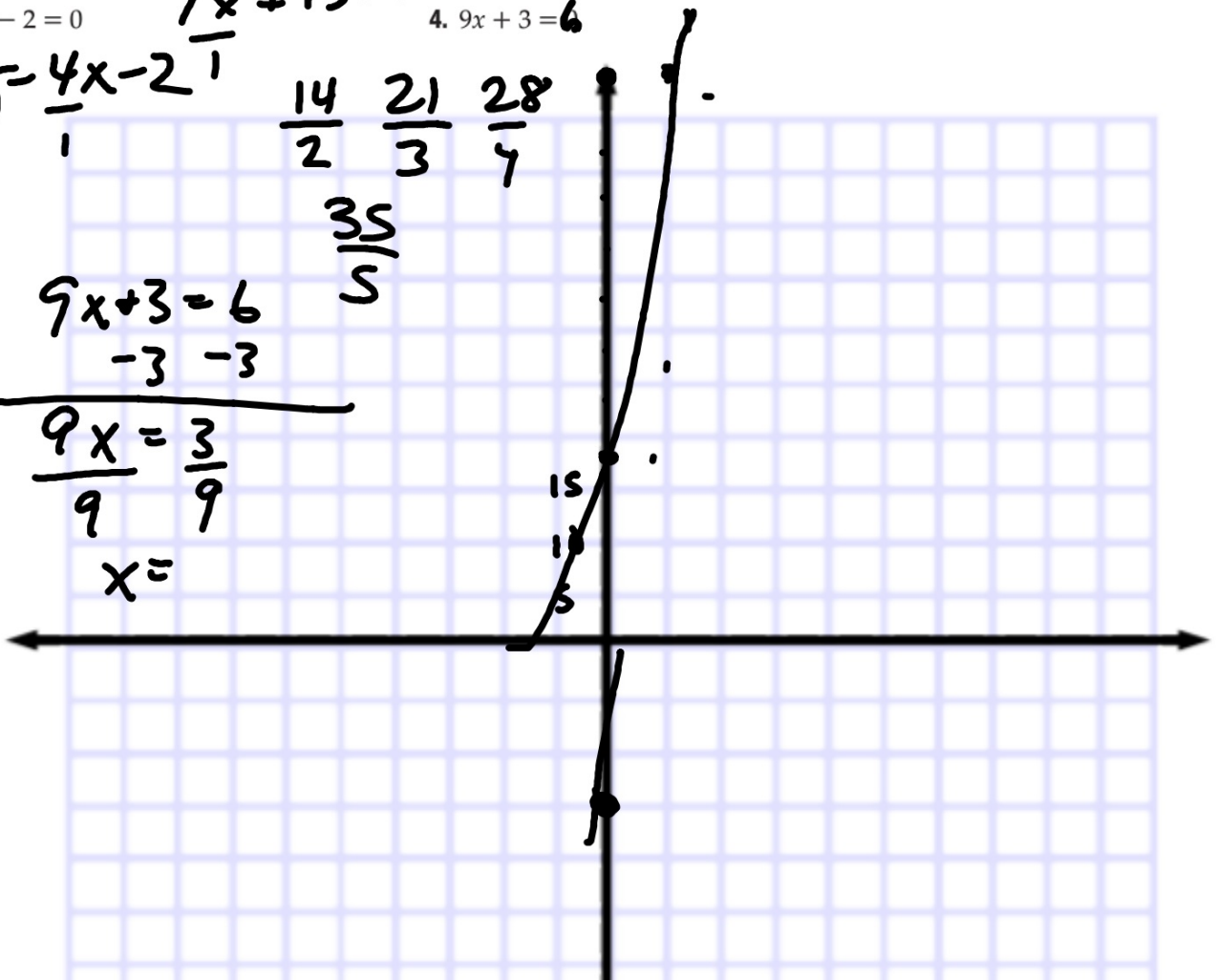
$$\frac{35}{5}$$

4. $9x + 3 = 6$

$$\begin{array}{r} 9x + 3 = 6 \\ -3 \quad -3 \\ \hline \end{array}$$

$$\frac{9x}{9} = \frac{3}{9}$$

$x =$



$$5. 2x - 5 = 2x + 8$$

|| C

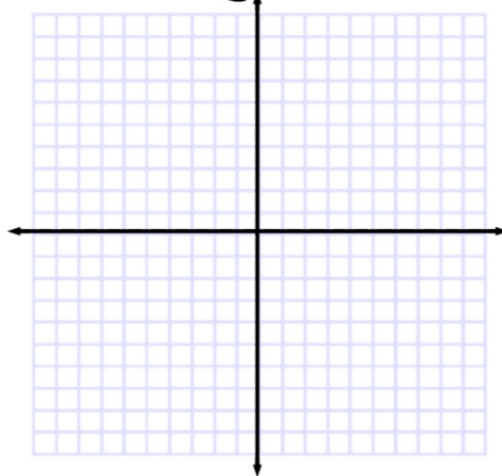
$$2x - 5 = 2x + 8$$

$$6. 4x + 11 = 5x - 24$$
$$\begin{array}{r} -4x \quad -4x \\ \hline \end{array}$$

$$11 = x - 24$$
$$\begin{array}{r} -11 \quad -11 \\ \hline \end{array}$$

$$0 = x - 35$$

$$y = x - 35$$



7. $3x - 5 = 3x - 10$

8. $-6x + 3 = -6x + 5$

1. $m = 0$

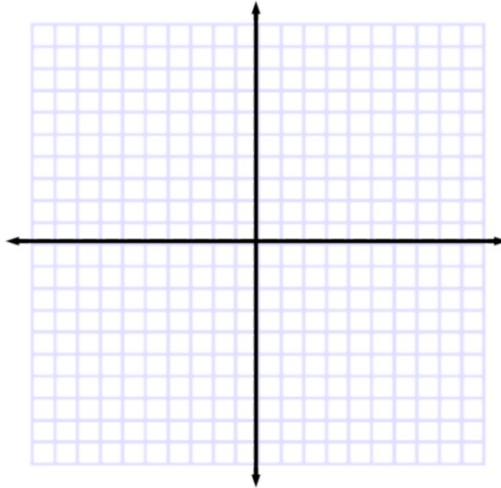
2. graph $y = mx + B$

3. x-int

$10 + 5x = 10 + 5x$

$10 = 10$

inf. many



9. **NEWSPAPERS** The function $w = 30 - \frac{3}{4}n$ represents the weight w in pounds of the papers in Tyrone's newspaper delivery bag after he delivers n newspapers. Find the zero and explain what it means in the context of this situation.

$$w = 30 + \frac{-3}{4}n$$
$$y = \underset{\substack{\uparrow \\ P}}{30} + \frac{\frac{-3}{4}n}{n}$$
$$0 = 30 + \frac{-3}{4}n$$
$$\frac{-3}{4}n = \frac{-30}{\frac{-3}{4}}$$
$$n = 40$$

WB 3.2 prac.
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