



Homework

Name:

Key

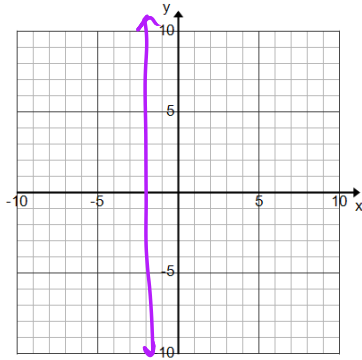
✓ Objective: Find the slope of the line given two points. ☺ ☹ ☹

1. Find the slope of the line given the points (3, -5) and (-2, -3).

$$\frac{-3 - (-5)}{-2 - 3} = \frac{2}{-5}$$

✓ Objective: Graph vertical and horizontal lines. ☺ ☹ ☹

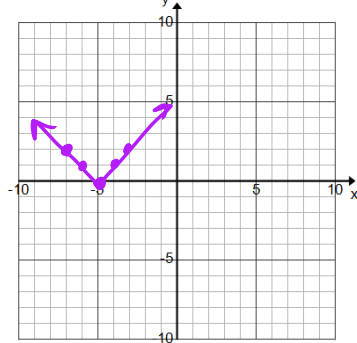
3. $x = -2$



✓ Objective: Graph absolute value functions and describe the transformations. ☺ ☹ ☹

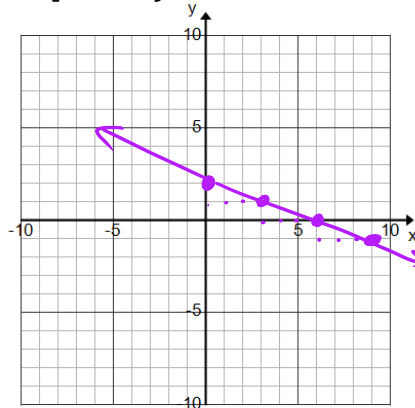
9. Graph $y = |x + 5|$

Left 5



✓ Objective: Write and graph an equation in Slope-Intercept Form $y = mx + b$. ☺ ☹ ☹

13. Given the slope is $-\frac{1}{3}$ and goes through (0, 2)



✓ **Objective: Solve Linear Application Problems.** ☺ ☹ ☹

21. Luke decides to work on his push-ups. Right now, he can do 35 push-ups. Every day, he can do two more push-ups.

a) Define your variables.

$$x = \text{days}$$

$$y = \# \text{ of push-ups}$$

b) Write an equation in slope-intercept form.

$$y = mx + b$$

$$y = 2x + 35$$

c) How many push-ups can he do in 20 days?

$$y = 2x + 35$$

$$2(20) + 35$$

$$75 \text{ push-ups}$$

d) On what day can he do 155 push-ups?

$$155 = 2x + 35$$

$$\begin{array}{r} 155 = 2x + 35 \\ -35 \quad -35 \\ \hline 120 = 2x \\ x = 60 \end{array}$$

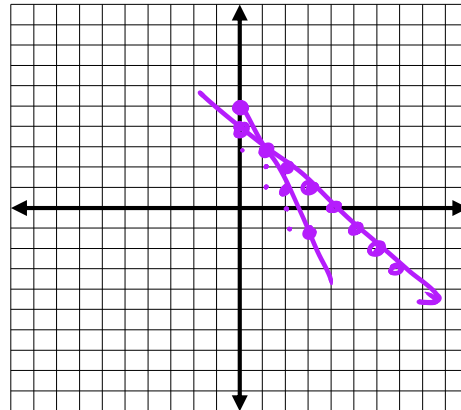
✓ **Objective: Solve a system by graphing.** ☺ ☹ ☹

Solve the system by graphing.

$$x + y = 4 \quad y = -x + 4$$

$$2x + y = 5 \quad y = -2x + 5$$

(1, 3)



✓ **Objective: Solve a system by substitution.** ☺ ☹ ☹

$$2x - y = 10$$

$$y = 5 - 3x$$

$$2x - (5 - 3x) = 10$$

$$2x - 5 + 3x = 10$$

$$5x = 15$$

$$x = 3$$

$$y = 5 - 3(3)$$

$$y = 5 - 9$$

$$y = -4$$

(3, -4)

Objective: Solve a system by elimination. ☺ ☹ ☹

$$2(2x - 3y = 4)$$

$$-4x + 5y = -8$$

$$\begin{array}{r} 4x - 6y = 8 \\ -4x + 5y = -8 \\ \hline -y = 0 \\ y = 0 \end{array}$$

$$2x - 0 = 4$$

$$x = 2 \quad (2, 0)$$