

Skills You'll Need

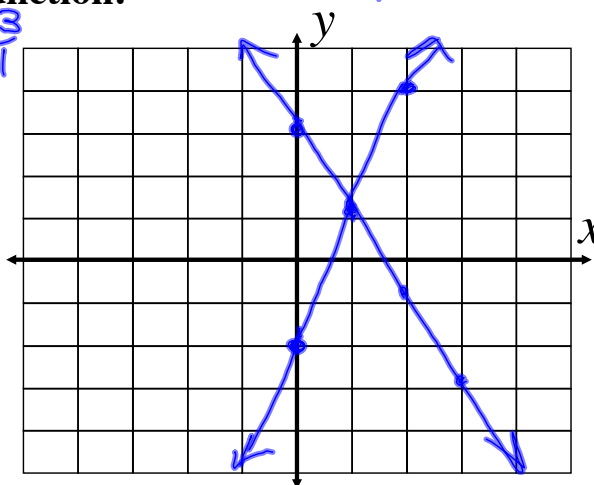
A _____ is a rule that assigns to each input exactly one output.
function

Graph each linear function.

$$y = 3x - 2$$

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

$$y = \frac{2}{3}x + 1$$



8th Grade

Lesson 5-1: Solving Systems by Graphing

Learning Goal:

- I can solve systems of two linear equations in two variables by graphing the equations.

What I Know:

What I Learned:

A **system of equations** is a set of two or more equations that have the same variables. The **solution of a system** is any ordered pair that satisfies all the equations in the system.

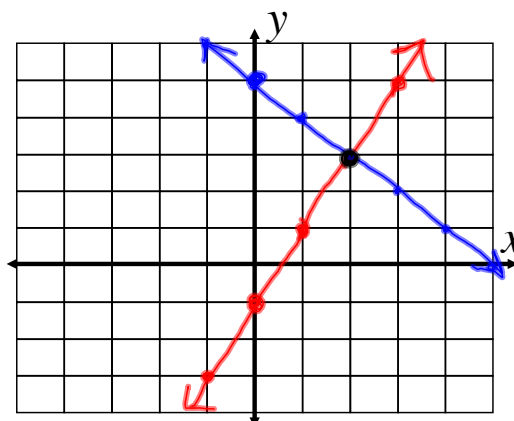
Solving a System by Graphing

Solve the system by graphing.

$$y = 2x - 1 \quad m=2 \quad b=-1$$

$$y = -x + 5 \quad m=-1 \quad b=5$$

The solution of the system is $(2, 3)$



$$x - y = 2$$

$$2x + y = 1$$

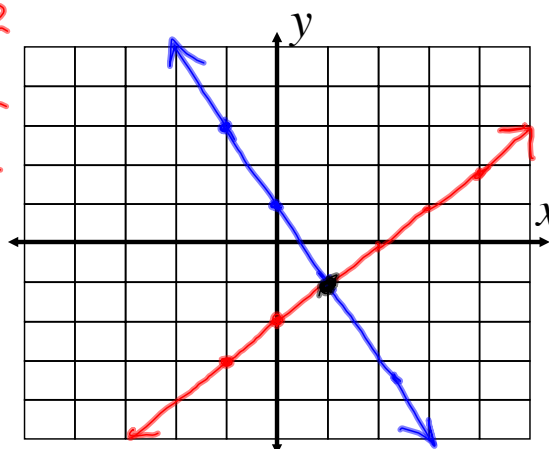
$x - y = 2$	
x	y
-1	-3
0	-2
1	-1

-1	-3	$-1 - (-3) = 2$
0	-2	$-1 - y = 2$
1	-1	$0 - y = 2$
		$1 - y = 2$

$2x + y = 1$	
x	y
-1	3
0	1
1	-1

-1	3	$2(-1) + y = 1$
0	1	$2(0) + y = 1$
1	-1	$2(1) + y = 1$

The solution of the system is $(1, -1)$

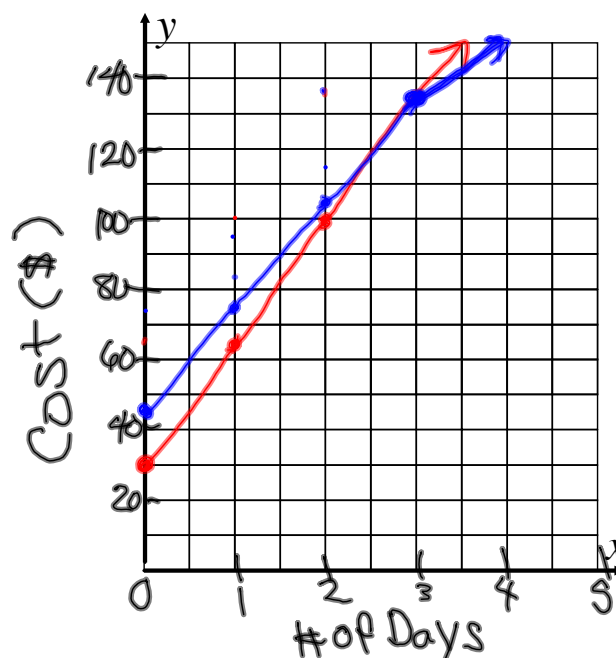


Application: Comparison Shopping

You need to rent a video camera. Video Barn charges a \$30 rental fee plus \$35 per day. Allied Rental charges a \$45 rental fee plus \$30 per day. Which company should you choose? Justify your answer.

Video Barn
 $C = 35d + 30$

Allied Rental
 $C = 30d + 45$



Assignment

8th Grade Lesson 5-1

Pg. 150 #6-12 even, 14-17 all

