

Curriculum Outcomes:

(PR1) Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.

(PR2) Graph linear relations, analyze the graph and interpolate or extrapolate to solve problems.

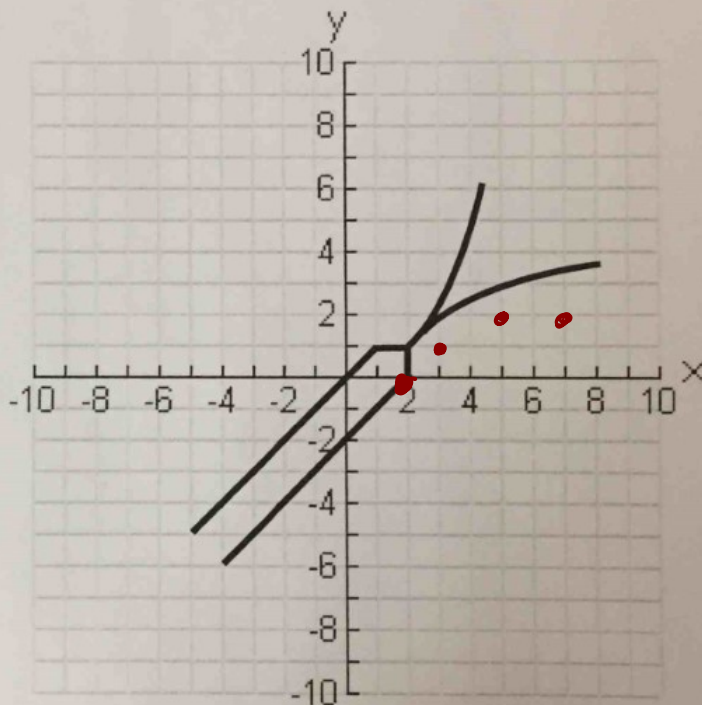
Student Friendly: Review of middle school graphing

Warm Up

Grade 9

Plot the points and connect the dots in order.

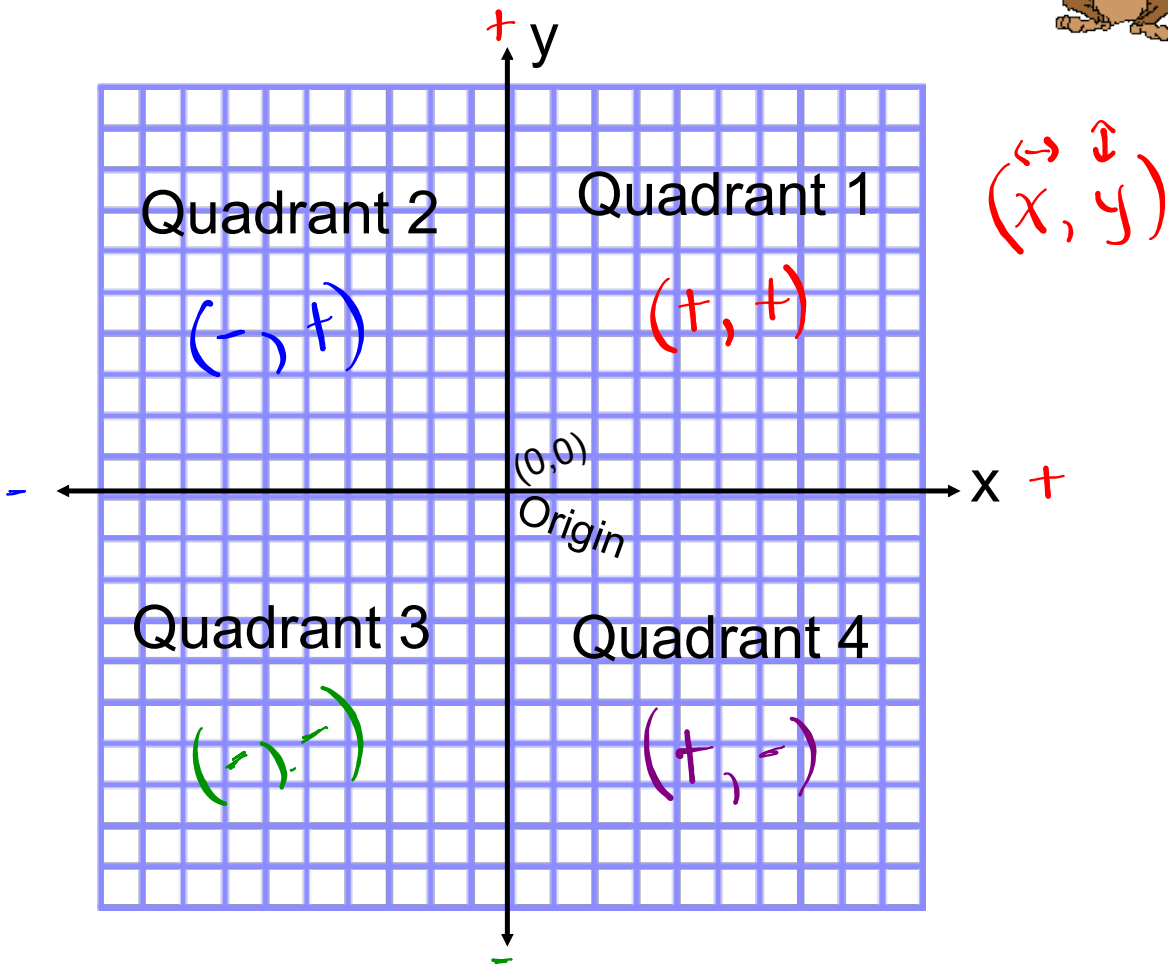
- (2, 0)
- (3, 1)
- (5, 2)
- (7, 2) (-7, -6)
- (8, 1) (-8, -5)
- (8, -1) (-8, -3)
- (6, -3) (-7, -2)
- (4, -4) (-4, -1)
- (2, -4) (-2, -1)
- (0, -3) (-3, 1)
- (0, -5) (-3, 3)
- (-1, -8) (-2, 5)
- (-2, -9) (0, 7)
- (-4, -9) (2, 7)
- (-5, -8) (3, 6)
- (-4, -6) (3, 4)
- (-5, -6) (2, 2)
- (-5, -5) (1, 1)



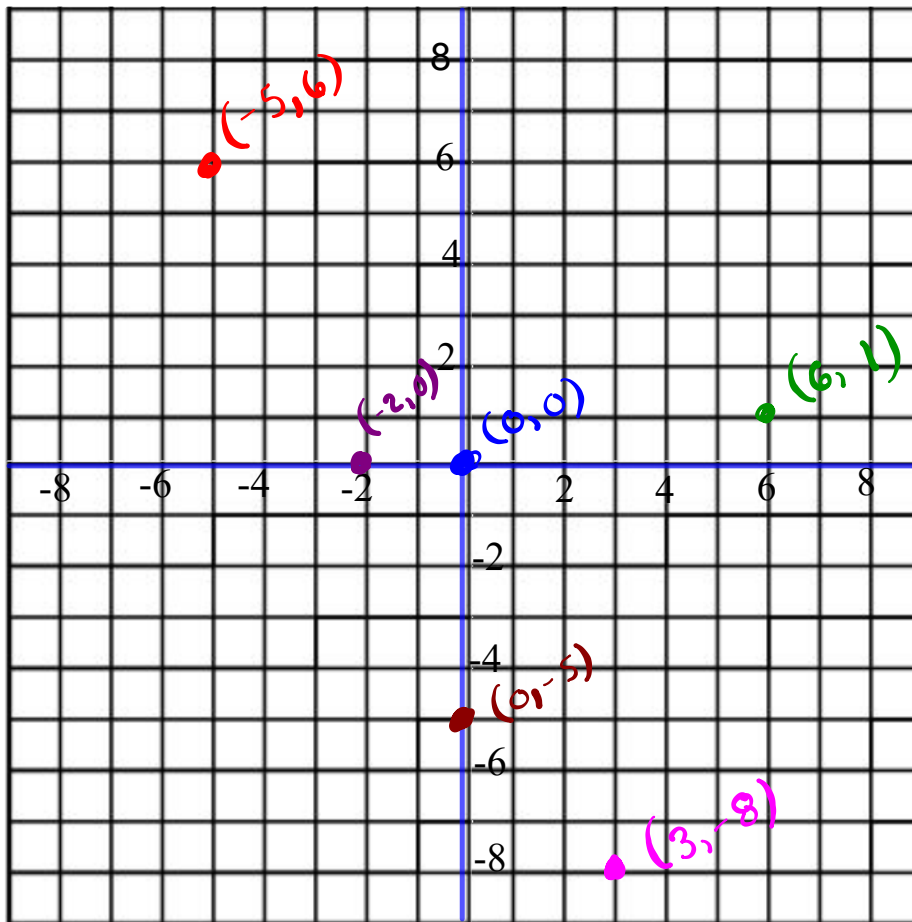
Math Out Loud

A quick, fun and engaging way of evaluating a student's mastery of graphing! These little exercises can be used as warm-ups, bonus questions, or brain breaks.

Coordinate Geometry Review



Recall



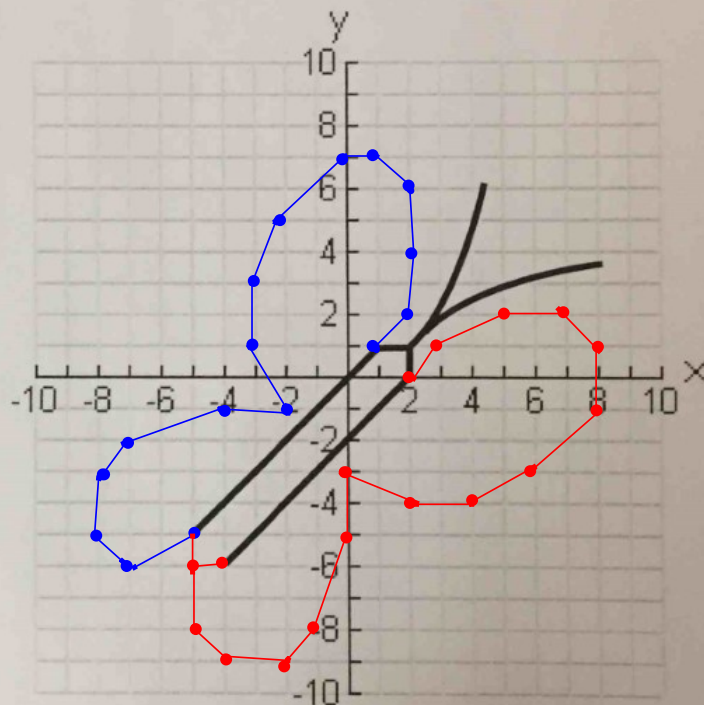
$(\leftarrow \rightarrow, \uparrow \downarrow)$
 (x, y)

x	y
-5	6
-2	0
0	0
3	-8
6	1
0	-5

Coordinate Graphing Pictures

Plot the points and connect the dots in order.

- | | |
|----------|----------|
| (2, 0) | |
| (3, 1) | |
| (5, 2) | |
| (7, 2) | (-7, -6) |
| (8, 1) | (-8, -5) |
| (8, -1) | (-8, -3) |
| (6, -3) | (-7, -2) |
| (4, -4) | (-4, -1) |
| (2, -4) | (-2, -1) |
| (0, -3) | (-3, 1) |
| (0, -5) | (-3, 3) |
| (-1, -8) | (-2, 5) |
| (-2, -9) | (0, 7) |
| (-4, -9) | (2, 7) |
| (-5, -8) | (3, 6) |
| (-4, -6) | (3, 4) |
| (-5, -6) | (2, 2) |
| (-5, -5) | (1, 1) |



Math Out Loud

A quick, fun and engaging way of evaluating a student's mastery of graphing! These little exercises can be used as warm-ups, bonus questions, or brain breaks.

Try these

For $n = 2$, solve for each of the following

1) $P = 5n + 6$

$$P = 5(2) + 6$$

$$p = 10 + 6$$

$$p = 16$$

$$(2, 16)$$

2) $K = 4n - 1$

$$K = 4(2) - 1$$

$$k = 8 - 1$$

$$k = 7$$

$$(2, 7)$$

3) $W = 10n - 5$

$$W = 10(2) - 5$$

$$W = 20 - 5$$

$$W = 15$$

$$(2, 15)$$

For $n = -5$, solve for each of the following

1) $P = 5n + 6$

$$P = 5(-5) + 6$$

$$P = -25 + 6$$

$$p = -19$$

2) $K = 4n - 1$

$$K = 4(-5) - 1$$

$$K = -20 - 1$$

$$K = -21$$

3) $W = 10n - 5$

$$W = 10(-5) - 5$$

$$w = -50 - 5$$

$$W = -55$$

Input Output Tables

x	y
-3	-1
0	5
3	11

$$y = 2x + 5$$

$$x = -3$$

$$y = 2(-3) + 5$$

$$y = -6 + 5$$

$$y = -1$$

$$x = 0$$

$$y = 2(0) + 5$$

$$y = 0 + 5$$

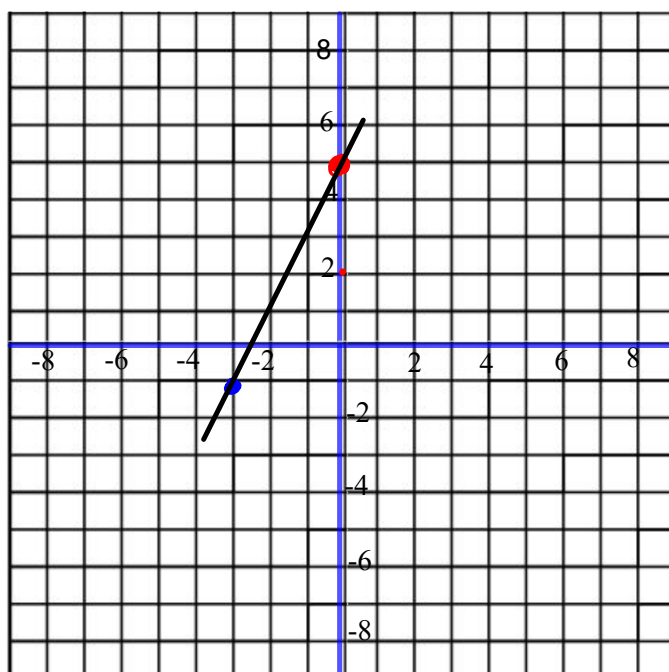
$$y = 5$$

$$x = 3$$

$$y = 2(3) + 5$$

$$y = 6 + 5$$

$$y = 11$$



Input Output Tables

$$y = \frac{x}{5} - 6$$

x	y
-5	-7
0	-6
5	-5

$$x = -5$$

$$y = \frac{-5}{5} - 6$$

$$y = -1 - 6$$

$$y = -7$$

$$x = 0$$

$$y = \frac{0}{5} - 6$$

$$y = 0 - 6$$

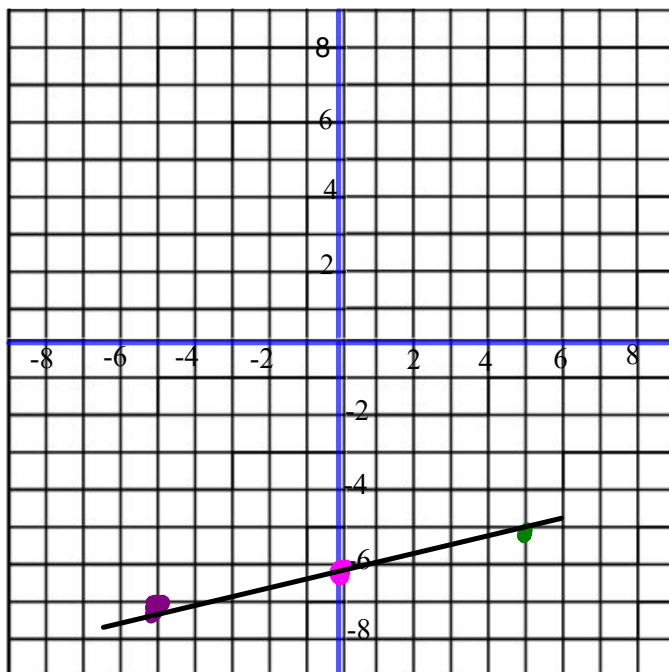
$$y = -6$$

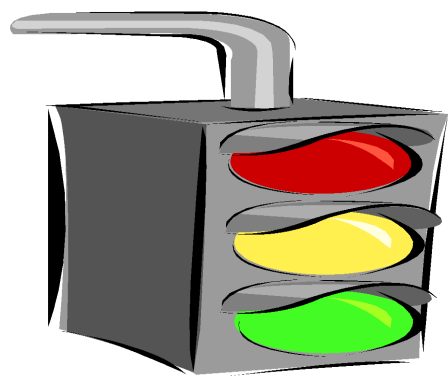
$$x = 5$$

$$y = \frac{5}{5} - 6$$

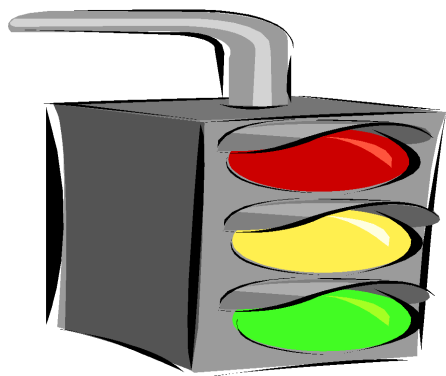
$$y = 1 - 6$$

$$y = -5$$





Now it is
time for
Home
Learning



Class/Homework

Worksheet 1

- Review of Cartesian Coordinates

Worksheet 2

- Input Output Charts

Section 4.1 Extra Practice.doc