KEY

AA – Lesson 5.3 Day 1 Graphing Lines With a Table of Values

Graph the linear equation by completing the table of values.

1. $y = 2x - 3$

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

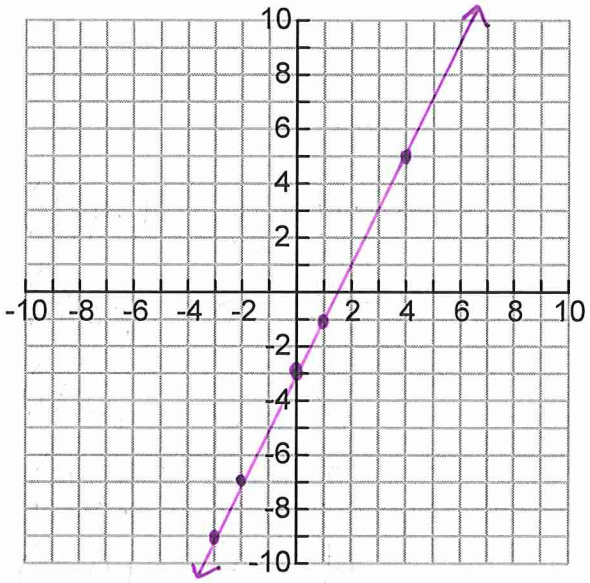
$y = 2(-2) - 3 = -7$

$y = 2(4) - 3 = 5$

$y = 2(-3) - 3 = -9$

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

x	y	(x, y)
0	-3	(0, -3)
-2	-7	(-2, -7)
4	5	(4, 5)
-3	-9	(-3, -9)
1	-1	(1, -1)



Graph the linear equation by making a table of solutions with 5 ordered pairs.

2. $y = -\frac{3}{5}x + 4$

$y = -\frac{3}{5}(0) + 4 = 4$

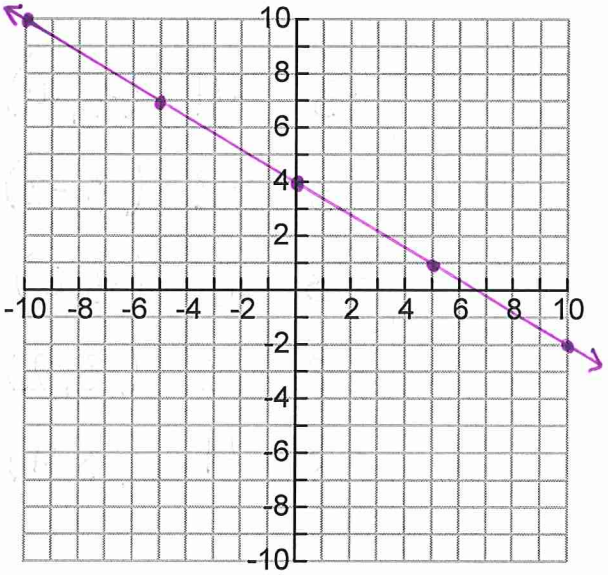
$y = -\frac{3}{5}(5) + 4 = 1$

$y = -\frac{3}{5}(-5) + 4 = 7$

$y = -\frac{3}{5}(10) + 4 = -2$

$y = -\frac{3}{5}(-10) + 4 = 10$

x	y	(x, y)
0	4	(0, 4)
5	1	(5, 1)
-5	7	(-5, 7)
10	-2	(10, -2)
-10	10	(-10, 10)



Questions to Ponder:

A. What do you notice about these two graphs?
Answers vary.

B. What do you notice about the slopes of these two graphs?
#1 is positive #2 is negative

C. What do you notice about the y-intercept of these two graphs?
#1 has a y-int of -3 #2 has a y-int of 4

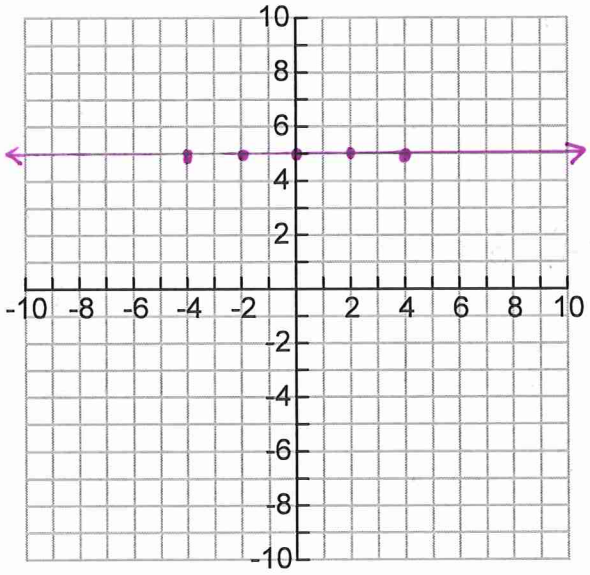
When a linear equation has two variables it will have a diagonal line.

Graphing linear equations with one variable.

Graph each equation by making a table of solutions with 5 ordered pairs.

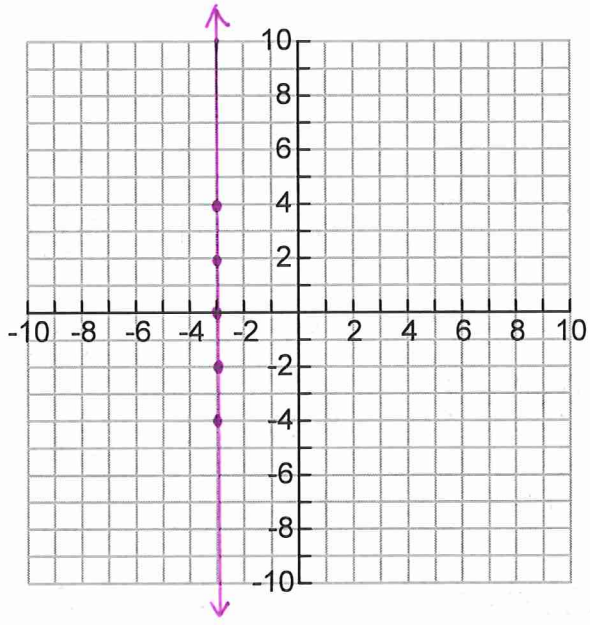
3. y = 5

x	y	(x, y)
-4	5	(-4,5)
-2	5	(-2,5)
0	5	(0,5)
2	5	(2,5)
4	5	(4,5)



4. x = –3

x	y	(x, y)
-3	-4	(-3,-4)
-3	-2	(-3,-2)
-3	0	(-3,0)
-3	2	(-3,2)
-3	4	(-3,4)



Questions to Ponder:

A. What do you notice about these two graphs?
Answers vary.

B. What do you notice about the slopes of these two graphs?
#3 has zero slope #4 has undefined slope

C. What do you notice about the y-intercepts of these two graphs?
#3 has a y-int of 5 #4 does not have a y-int

When a linear equation has one variable its graph will not be diagonal.

Y-only equations will graph as a horizontal line. **HOY**

X-only equation will graph as a vertical line. **VUX**