

Starter 23 OCT 2018
 Complete the table.

x	$y = -2x^2$	y
-2	$y = -2(-2)^2$	-8
-1	$y = -2(-1)^2$	-2
0	$y = -2(0)^2$	0
1	$y = -2(1)^2$	-2
2	$y = -2(2)^2$	-8

Step 1: Solve for y Step 2: Choose 3 values for x. Complete the table.
 Step 3: Plot points and graph the line.

1) $2x + y = 1$

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

2) $x - y = 5$
 $-x + y = -5$
 $y = x - 5$

3) $3x + y = -4$
 $-3x - y = 4$
 $y = 3x + 4$

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

5) $-2x + 3y = 6$
 $2x - 3y = -6$
 $y = \frac{2}{3}x + 2$

6) $x + 4y = 12$

$$\frac{x}{1} + \frac{4y}{4} = \frac{12}{4}$$

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

$$y = -\frac{1}{4}x + 3$$

7) $x + y + 6 = 0$

$$x + y = -6$$

$$y = -x - 6$$

8) $3x = 2y + 8$

$$3x - 8 = 2y$$

$$y = \frac{3x - 8}{2}$$

$4x + 5y = 10$

$$4x + 5\left(\frac{3x - 8}{2}\right) = 10$$

$$4x + \frac{15x - 40}{2} = 10$$

$$\frac{8x + 15x - 40}{2} = 10$$

$$\frac{23x - 40}{2} = 10$$

$$23x - 40 = 20$$

$$23x = 60$$

$$x = \frac{60}{23}$$

$$y = \frac{3\left(\frac{60}{23}\right) - 8}{2}$$

$$y = \frac{\frac{180}{23} - 184}{2}$$

$$y = \frac{\frac{180 - 4232}{23}}{2}$$

$$y = \frac{-4052}{46}$$

$$y = -\frac{1013}{11.5}$$

4) $x - 2y = 2$

x	y =	(x, y)
-2		
0		
2		

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

$(-2, -2)$
 $(0, -1)$
 $(2, 0)$

$y = \frac{1}{2}(-2) - 1$
 $y = \frac{1}{2}(0) - 1$