

## WARMUP - in notebook

Find x-intercepts and y-intercepts of

Line 1)  $3x - 4y = 72$

1)  $\frac{x\text{-int}}{\text{set } y=0}$

$$3x = 72$$

$$x = 24$$

$$(24, 0)$$

$\frac{y\text{-int}}{\text{set } x=0}$

$$-4y = 72$$

$$y = -18$$

$$(0, -18)$$

Parabola 2)  $5x^2 + 10y = 125$

2)  $\frac{x\text{-int}}$

$$5x^2 = 125$$

$$x^2 = 25$$

$$x = \pm\sqrt{25} = \pm 5$$

$$(5, 0), (-5, 0)$$

$\frac{y\text{-int}}$

$$10y = 125$$

$$y = 12.5$$

$$(0, 12.5)$$

## Section 1.2 Intro to Graphing Equations

ex: Determine if points are solutions to  $2x - y = 6$

a)  $(2, 3)$

$$2 \cdot 2 - 3$$

$$4 - 3$$

$$= 1$$

Nope!

b)  $(2, -2)$

$$2 \cdot 2 - (-2)$$

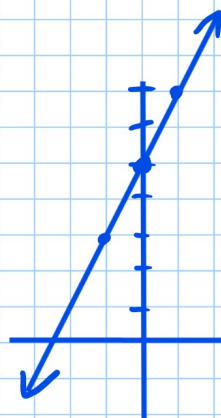
$$4 + 2$$

$$= 6 \checkmark$$

ex: Graph  $y = 2x + 5$

$$y = mx + b$$

$$m = \frac{2}{1}$$



x	y
-1	3
0	5
1	7

ex:  $6x^2 + 3y = 36$

$$\frac{3y}{3} = \frac{-6x^2}{3} + \frac{36}{3}$$

$$y = -2x^2 + 12 \quad \text{Parabola}$$

x-int

$$-2x^2 + 12 = 0$$

$$-2x^2 = -12$$

$$x^2 = 6$$

$$x = \pm\sqrt{6}$$

$$x = \pm 2.45$$

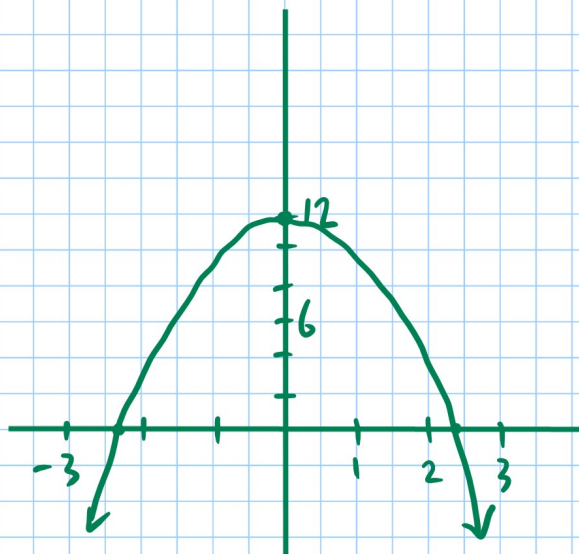
$$(-2.45, 0), (2.45, 0)$$

y-int

$$y = -2 \cdot 0^2 + 12$$

$$y = 12$$

$$(0, 12)$$



$$2x^2 - 3y = 35$$

$$\frac{-3y}{-3} = \frac{35 - 2x^2}{-3}$$

$$y = \frac{35 - 2x^2}{-3}$$

p. 19-20

1-17 odd, 19,

25, 29, 31-37 odd