

10/17/18

## Graphs of Equations

1. Lines
2. Circles

Standard form:  $2x + 3y = 12$

3. Linear equation with both x's and y's  
is a slanted line

x	y
6	0
0	4

$$2x + 3(0) = 12$$

$$2x = 12$$

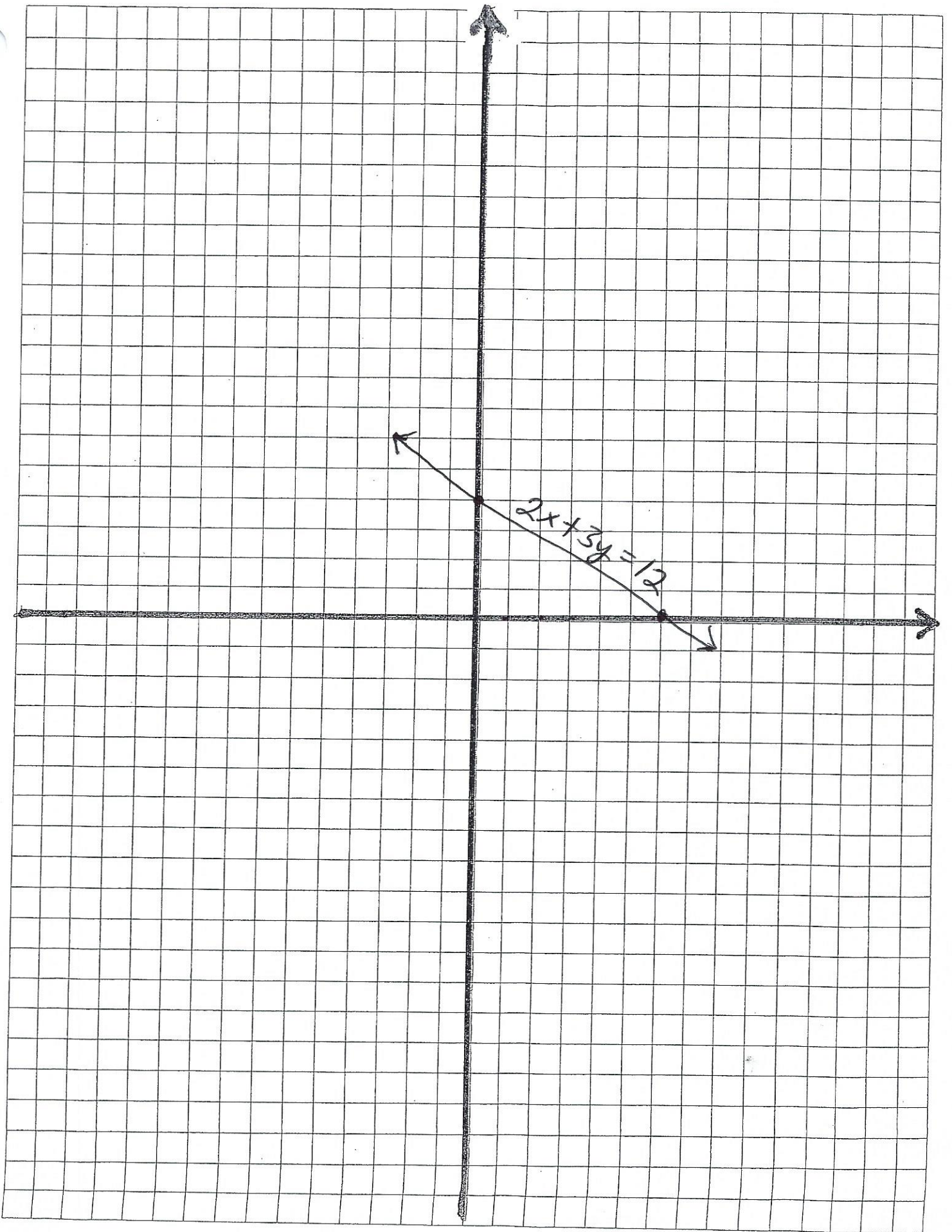
$$x = 6$$

$$2(0) + 3y = 12$$

$$3y = 12$$

$$y = 4$$

Graph on next page



$$y = 2 - |x - 6| \quad \text{Point } (1, 7)$$

$$7 \stackrel{?}{=} 2 - |1 - 6|$$

$$7 \stackrel{?}{=} 2 - |-5|$$

$$7 \neq 2 - 5$$

$$y = \frac{x^3}{3} - 7x^2 \quad \text{Point } (2, -\frac{76}{3})$$

$$\cancel{y} - \frac{76}{3} \stackrel{?}{=} \frac{1}{3}(2)^3 - 7(2)^2$$

$$-\frac{76}{3} = \frac{1}{3}(8) - 7(4)$$