

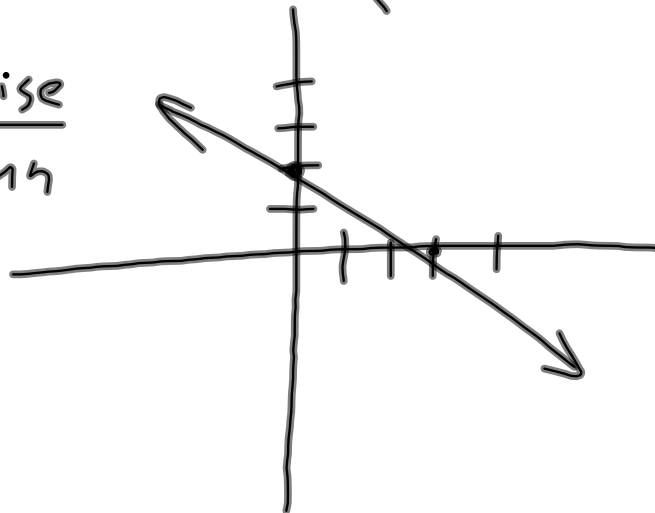
## Bell Work

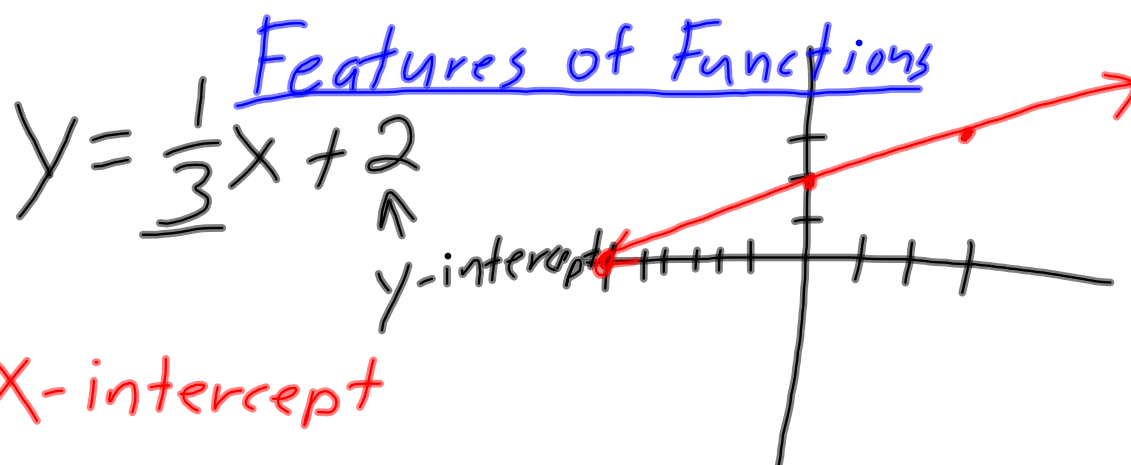
$$\begin{array}{r}
 2x + 3y = 6 \\
 \underline{-2x} \qquad \qquad \qquad -2x \\
 \hline
 3y = -2x + 6 \\
 \frac{3y}{3} = \frac{-2x}{3} + \frac{6}{3} \\
 \hline
 y = -\frac{2}{3}x + 2
 \end{array}$$

Subtraction  
property  
of Equality

$$m = \text{slope} = \frac{\text{rise}}{\text{run}}$$

$$\frac{y_2 - y_1}{x_2 - x_1}$$





X-intercept

Y-intercept - where we cross the Y-axis.

X-intercept - where we cross the X-axis

$$y = \frac{1}{3}x + 2 \quad y = \frac{1}{3}(1) + 2 = 2\frac{1}{3}$$

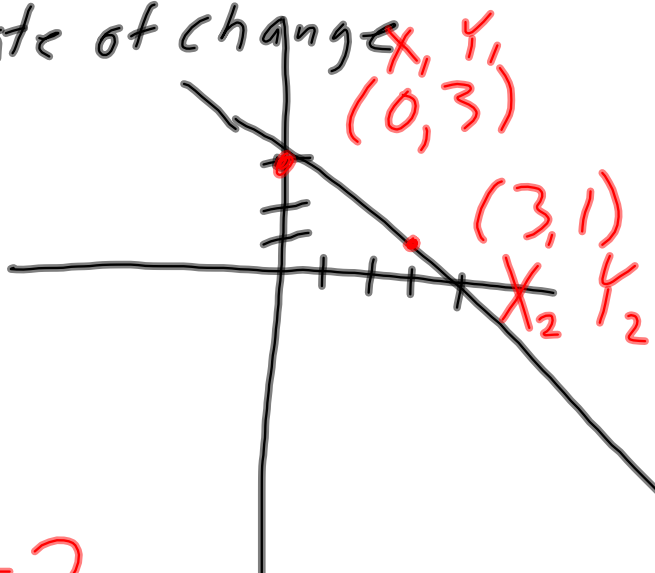
$$0 = \frac{1}{3}x + 2$$

$$\frac{-2}{\frac{1}{3}} = \frac{-2}{\frac{1}{3}}$$

$$-6 = x$$

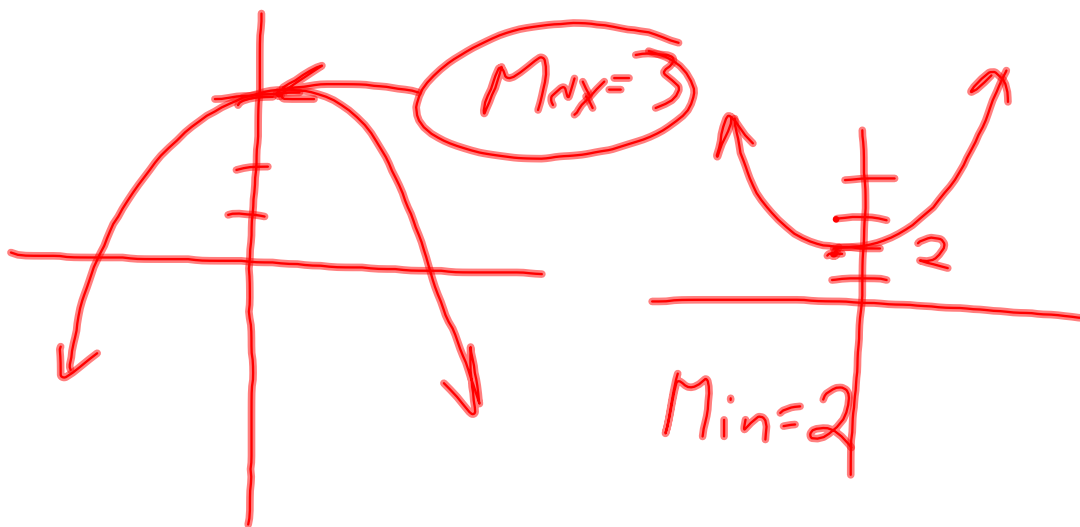
Slope = rate of change

$$\frac{y_2 - y_1}{x_2 - x_1}$$



$$\frac{1 - 3}{3 - 0} = -\frac{2}{3}$$

Max - Maximum - Highest Point  
Min - Minimum - Lowest Point

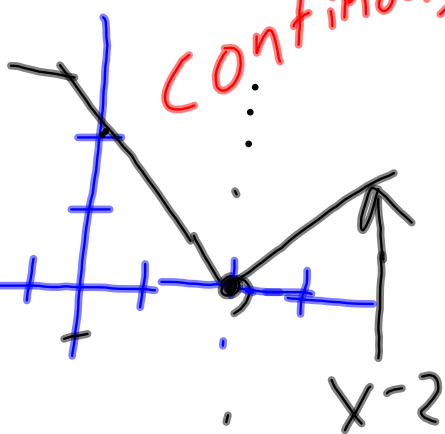


#8

$$\begin{cases} -x+2, & x < 2 \\ x-2, & x \geq 2 \end{cases}$$

 $-x+2$ 

continuous



$$f(x) = \begin{cases} 3x-5, & x > 4 \\ x^2, & x \leq 4 \end{cases}$$

$$\begin{aligned} f(7) &= 3(7) - 5 \\ &= 21 - 5 \\ &= 16 \end{aligned}$$

$$f(x) = \begin{cases} -5, & x < 0 \\ 2, & x \geq 0 \end{cases}$$

$f(x)$  ← same as  $y$

$$f(x) = -5$$
$$y = -5$$

$$y = 2$$
$$f(x) = 2$$

