

What is the measure of angle 1?
 $180 - (120 + 100)$

Oct 7-1:35 PM

Triangles equal 180 degrees

Oct 7-1:38 PM

Lines with same slope are parallel
 Lines with negative reciprocal slopes are perpendicular
 Lines with neither of the above are not parallel or perpendicular

What about the line going through point (1,0) (7,4) and the line going through points (7,0) (3,6)

$$\frac{y-y_1}{x-x_1} = \frac{y_2-y_1}{x_2-x_1}$$

$$\frac{y-0}{x-1} = \frac{4-0}{7-1}$$

$$\frac{y}{x-1} = \frac{4}{6}$$

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

Oct 7-1:43 PM

Parallel lines have the same slope
 Give an equation of a line that is parallel to $y = \frac{3}{4}x + 2$ and passes through (2,5) $m = \frac{3}{4}$

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

Graph it

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

$$+5 \quad + \frac{15}{4}$$

$$y = \frac{3}{4}x + \frac{7}{2}$$

Oct 7-1:40 PM

pt (0,2)
 || line (-2,4) (-5,1)

$$m = \frac{4-1}{-2-(-5)} = \frac{3}{3} = 1$$

$$\frac{y-y_1}{x-x_1} = \frac{y_2-y_1}{x_2-x_1}$$

$$\frac{y-4}{x-(-2)} = \frac{1-4}{-5-(-2)}$$

$$\frac{y-4}{x+2} = \frac{-3}{-3} = 1$$

$$y = mx + b$$

$$2 = 1(0) + b$$

$$2 = b$$

$$y - y_1 = m(x - x_1)$$

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

$$y - 2 = x$$

$$y = x + 2$$

Oct 7-2:29 PM

$m = 0$
 $\frac{0}{x}$

$m = \text{undefined}$
 $\frac{x}{0}$

Oct 7-2:25 PM