

August 7, 2022



$$(-9, -9) \text{ and } (-6, 0)$$

$$(y_2 - y_1) = m(x_2 - x_1)$$

$$0 - (-9) = m(-6 - (-9))$$

$$0 + 9 = m(-6 + 9)$$

$$\frac{9}{3} = \frac{m(3)}{3}$$

$$m = 3$$

$$b = y - mx$$

$$b = (-9) - (3)(-9)$$

$$b = -9 - (-27)$$

$$b = -9 + 27$$

$$b = 18$$

$$y = 3x + 18$$

$$90 + m(8) = 138$$

$$90 + 8m = 138$$

$$\begin{array}{r} -90 \\ -90 \end{array}$$

$$\frac{8m}{8} = \frac{48}{8}$$

$$m = 6$$

$$b = y - mx$$

$$b = 90 - (6 \cdot 0)$$

$$b = 90$$

$$y = 6x + 90$$

$$y = 6(8) + 90$$

$$y = 48 + 90$$

$$y = 138$$

$$8, 138$$

$$0, 90$$

$$(-10, 3) \text{ and } (-8, -8)$$

$$(y_2 - y_1) = m(x_2 - x_1)$$

$$-8 - 3 = m(-8 - (-10))$$

$$-11 = m(-8 + 10)$$

$$\frac{-11}{2} = \frac{2m}{2}$$

$$m = -\frac{11}{2}$$

$$b = y - mx$$

$$b = 3 - \left(-\frac{11}{2} \cdot -10\right)$$

$$b = 3 - 55$$

$$b = -52$$

$$y = -\frac{11}{2}x - 52$$

$$-7 - 6m = -16$$

$$+7 \quad +7$$

$$\frac{-6m}{-6} = \frac{-9}{-6}$$

$$m = \frac{3}{2}$$

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

$$(6, 16)$$

$$b = y - mx$$

$$b = 16 - \left(-\frac{3}{2} \cdot 6\right)$$

$$b = 16 - (-9)$$

$$b = 16 + 9$$

$$b = 25$$

$$y = mx + b$$

$$y = -\frac{3}{2}x + 25$$

$$y - \text{int} = -5$$

$$(0, -5) \text{ and } (5, 1)$$

$$y = \frac{6}{5}x - 5$$

$$-7x + 5y = 35$$

$$+7x$$

$$\frac{5y}{5} = \frac{35 + 7x}{5}$$

$$y = \frac{7}{5}x + 7$$

$$8x - 6y = 1$$

$$-8x \quad -8x$$

$$\frac{-6y}{-6} = \frac{-8x + 1}{-6}$$

$$y = \frac{8}{6}x - \frac{1}{6}$$

$$m = \frac{8}{6} = \frac{4}{3}$$

$$y + 4 = -6(x + 6)$$

$$y + 4 = -6x - 36$$

$$+6x$$

$$6x + y + 4 = -36$$

$$-y \quad -y$$

$$6x + y = -40$$

$$(6, 4) \text{ and } (7, 2)$$

$$(y_2 - y_1) = m(x_2 - x_1)$$

$$2 - 4 = m(7 - 6)$$

$$-2 = m$$

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

$$y - 2 = -2(x - 7)$$

$$\begin{array}{r} -9x + 6y = 18 \\ +9x \qquad +9x \end{array}$$

$$\frac{6y}{6} = \frac{9x + 18}{6}$$

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

$$(1, -1) \text{ and } (5, 2)$$

$$(y_2 - y_1) = m(x_2 - x_1)$$

$$2 - (-1) = m(5 - 1)$$

$$2 + 1 = m(4)$$

$$\frac{3}{4} = \frac{4m}{4}$$

$$m = \frac{3}{4}$$

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

$$(-8, 8) \text{ and } (1, -10)$$

$$(y_2 - y_1) = m(x_2 - x_1)$$

$$-10 - 8 = m(1 - (-8))$$

$$-18 = m(1 + 8)$$

$$\frac{-18}{9} = \frac{9m}{9}$$

$$m = -2$$

$$y = -2x - 8$$

$$b = y - mx$$

$$b = (8) - (-2 \cdot -8)$$

$$b = 8 - (16)$$

$$b = -8$$

$$b = y - mx$$

$$b = -6 - \left(\frac{4}{5} \cdot 3\right)$$

$$b = -6 + \frac{12}{5}$$

$$b = -\frac{18}{5}$$

$$(-3, -6) \text{ and } (2, -2)$$

$$(y_2 - y_1) = m(x_2 - x_1)$$

$$(-2 - (-6)) = m(2 - (-3))$$

$$-2 + 6 = m(2 + 3)$$

$$\frac{4}{5} = \frac{5m}{5}$$

$$m = \frac{4}{5}$$

$$y = \frac{4}{5}x - \frac{18}{5}$$

$$y - 3 = 5(x - 2)$$

$$\boxed{m = 5}$$

$$W = 80 + 5.4t$$

$$W = 80 + 5.4(0)$$

$$\boxed{W = 80}$$

$$28 = -8(3) + b$$

$$28 = \cancel{-24} + b$$
$$+24 \quad +24$$

$$52 = b$$

$$\boxed{y = -8x + 52}$$

$$y = \frac{6}{5}x + 9$$

$$5(y) = 5\left(\frac{6}{5}x + 9\right)$$

$$5y = \cancel{6x} + 45$$
$$-6x$$

$$\boxed{-6x + 5y = 45}$$