

- a. Determine a linear regression equation for the data. Round the slope and y-intercept whole number.

$$y = 69,79x - 13,33$$

- b. Identify the correlation coefficient, or r -value, of the line. What does this value tell you?
- c. Predict the distance traveled after 20 hours. Show your work and explain your reasoning.

$$r = ,9957$$

$$\approx 1382,47$$

- i. The Volume of a triangular prism described by the equation $V = \frac{1}{2}BH \pm$. Where (B= base, H=height and L=length.
- b. Solve the equation for the H.

$$2. V = \frac{1}{2} BHL$$

$$\frac{2V}{BL} = \frac{BH \pm L}{BL}$$

$$\frac{2V}{BL} = H$$

- c. If the volume of the prism is 80 in^3 , $B=4$ in and $L=2$ in, what is the height?

$$\frac{2(80)}{4(2)} = \frac{160}{8} = 20 = H$$

Given the equation: $y = \frac{3}{4}x + 2$

- a. What is the slope of the equation?

$$\frac{3}{4}$$

- b. Write the equation in standard form.

$$4y = 4\left(\frac{3}{4}x + 2\right)$$

$$4y = 3x + 8$$

$$-3x - 3x$$

$$-3x + 4y = 8$$

- c. Determine the x and y intercepts.

$$(0, 2)$$

$$(-2\frac{2}{3}, 0)$$

$$-3x = 8$$

$$-3 = -3$$

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

- d. Graph the equation.

