

Information that may or may not be needed:

$$m = \frac{n(\sum x_i y_i) - (\sum x_i)(\sum y_i)}{n(\sum x_i^2) - (\sum x_i)^2}$$

$$b = \frac{\sum y_i - m(\sum x_i)}{n}$$

$$r^2 = \left[\frac{n(\sum x_i y_i) - (\sum x_i)(\sum y_i)}{\sqrt{n(\sum x_i^2) - (\sum x_i)^2} \sqrt{n(\sum y_i^2) - (\sum y_i)^2}} \right]^2$$

color	digit
black	0
brown	1
red	2
orange	3
yellow	4
green	5
blue	6
violet	7
gray	8
white	9

$$\eta = \frac{\frac{1}{2}mv^2 + Wh}{VIt}$$

$$m = \frac{W}{g}$$

$$Vol = \frac{W}{\rho g}$$

$$v = \frac{Vol}{At} = \frac{W}{\rho g At}$$

$$Q = v \cdot A$$

$$A = \frac{\pi}{4}d^2 = \pi r^2$$

Density of water = 1000 kg/m³ = 1 g/cm³

Density of water = 1 kg/L

1 kg = 1000 g

1 L = 0.001 m³

g = 9.81 m/s²

1 gallon = 3.785 L

1 inch = 2.54 cm 1 foot = 12 in

1 coulomb = 6.24(10)¹⁸ electrons

Avogadro's Number = 6.022(10)²³ per mol

$$\text{cylinder volume} = \frac{\pi \cdot \text{diameter}^2}{4} \cdot \text{height}$$