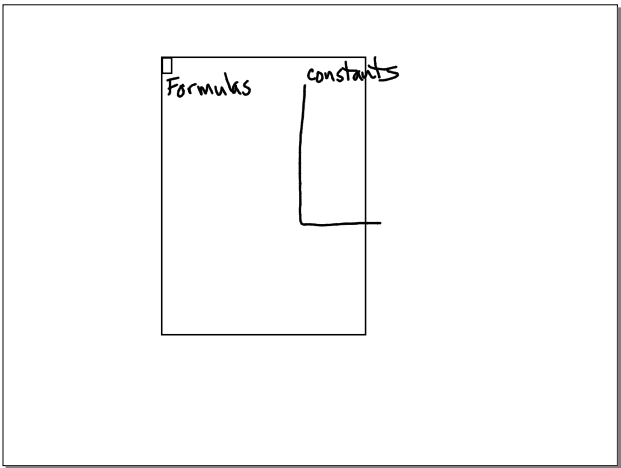


Sept 6 - CP
 Be able to perform dimensional analysis, aka converting.

$$\begin{aligned}
 & \frac{1 \text{ Quarter}}{1} \times \quad = \quad \text{Nickels} \\
 & \text{1 Quarter} = 5 \text{ Nickels} \\
 & \frac{1 \text{ Quarter}}{5 \text{ Nickels}} = 1 = \frac{5 \text{ Nickels}}{1 \text{ Quarter}} \\
 & \frac{1 \text{ Quarter}}{1} \times \frac{5 \text{ Nickels}}{1 \text{ Quarter}} = \boxed{5 \text{ Nickels}}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{2 \text{ Quarters}}{1} \left(\frac{25 \text{ Pennies}}{1 \text{ Quarter}} \right) \left(\frac{1 \text{ dime}}{10 \text{ Pennies}} \right) = \quad \text{dimes} \\
 & \frac{(2)(25)(1)(\text{dime})}{10} \\
 & \frac{50}{10} \text{ dimes} = \boxed{5 \text{ dimes}}
 \end{aligned}$$



$$1 \text{ inch} = 2.54 \text{ cm}$$

$$\frac{12 \cancel{\text{in}}}{1} \left(\frac{2.54 \text{ cm}}{1 \cancel{\text{in}}} \right) = \frac{12 \cdot 2.54 \cdot \text{cm}}{1} = 30.48 \text{ cm}$$

$$\frac{1 \text{ in}}{2.54 \text{ cm}} \quad \frac{2.54 \text{ cm}}{1 \text{ in}}$$

$$\frac{50 \text{ cm}}{1} \left(\frac{1 \cancel{\text{in}}}{2.54 \text{ cm}} \right) \left(\frac{1 \text{ ft}}{12 \cancel{\text{in}}} \right)$$

$$\boxed{1.64 \text{ ft}}$$

$$\frac{50 \cdot \cancel{\text{cm}} \cdot \text{ft}}{2.54 \cdot 12}$$

$$8,100,000 \text{ sec}$$

days

$$\frac{8,100,000 \text{ sec}}{1} \left(\frac{1 \cancel{\text{min}}}{60 \text{ sec}} \right) \left(\frac{1 \cancel{\text{hr}}}{60 \cancel{\text{min}}} \right) \left(\frac{1 \text{ day}}{24 \cancel{\text{hr}}} \right) = \boxed{1.16 \text{ days}}$$