Dimensional Analysis

$\frac{30 \text{ dimes}}{1}\left(\frac{1 \text{ Qtr}}{2.5 \text{ dimes}}\right)$ Yes

$\frac{2.5 \text{ dimes}}{\text{Qtr}}$ or $\frac{1 \text{ Qtr}}{2.5 \text{ dimes}}$

$\frac{(30)(\text{dimes})(1)(\text{Qtr})}{(1)(2.5)(\text{dimes})}$

1 Qtr = 2.5 dimes

$\frac{30 \text{ Qtr}}{2.5} = \boxed{12 \text{ Qtr}}$

No

$\frac{30(\text{dimes})}{1}\left(\frac{2.5(\text{dimes})}{\text{Qtr}}\right) = \frac{75 \text{ dimes}^2}{\text{Qtr}}$

$\frac{12.5(\text{ft})}{1}\left(\frac{12 \text{ in}}{1(\text{ft})}\right) = \boxed{150 \text{ in}}$ inches

1 ft = 12 inches

$\frac{146 \text{ in}}{\text{min}}\left(\frac{1 \text{ ft}}{12 \text{ in}}\right)\left(\frac{1 \text{ min}}{60 \text{ sec}}\right)$ $\frac{\text{ft}}{\text{sec}}$

$\frac{146 \text{ ft}}{12(60) \text{ sec}} = \boxed{.20 \frac{\text{ft}}{\text{sec}}}$

$\frac{146}{720}$ $\frac{146}{12}(60)$ $\frac{146}{(12 \times 60)}$

3ft = 1yd

1ft = 12 in

1 Km = 1000 m

1m = 100 cm