

Review

1. Determine each conversion.

- 24 in. = _____ cm
- 6 qt = _____ c
- 18 ft = _____ m
- 5 mi = _____ km
- 2.5 m = _____ in.

$$1a. \frac{1 \text{ in.} \times 24}{2.54 \text{ cm}} = \frac{24 \text{ in.}}{60.96 \text{ cm}}$$

$$1b. \frac{4 \text{ c} \times 6}{1 \text{ qt}} = \frac{24 \text{ c}}{6 \text{ qt}}$$

$$1c. \frac{1 \text{ m}}{3.3 \text{ ft}} \times 18 \text{ ft} = 5.45 \text{ m}$$

$$1d. \frac{1 \text{ mi}}{1.6 \text{ km}} \times 5 = \frac{5 \text{ mi}}{8.0 \text{ km}}$$

$$1e. \frac{1 \text{ m}}{39.37 \text{ in.}} \times 2.5 = \frac{2.5 \text{ m}}{98.425 \text{ in.}}$$

- At Union Middle School, 99 boys, or 36% of the boys, play basketball. How many boys attend Union Middle School? Show your work.
- At Union Middle School, there are a total of 250 girls, 22% of whom play basketball. How many girls at Union Middle School play basketball? Show your work.
- Determine each value.
 - 7% of 26
 - 28% of 90

$$\begin{aligned} \textcircled{2} \quad \frac{99 \text{ boys}}{x} &= \frac{36}{100} \\ 9900 &= 36x \\ 9900 \div 36 &= x \\ 275 &= x \\ \text{boys @ UMS} \end{aligned}$$

$$\textcircled{3} \quad \frac{22}{100} = \frac{x}{250}$$

$$100x = 22(250)$$

$$x = 5500 \div 100$$

$$x = 55 \text{ girls play basketball}$$

$$\textcircled{4} \text{ a) } 7\% \text{ of } 26 = (.07)(26) = 1.82$$

$$\begin{array}{r} 26 \\ \times 1.07 \text{ 2dec} \\ \hline 1.82 \end{array}$$

$$\textcircled{b} \quad 28\% \text{ of } 90 = .28(90) = 25.20$$

$$\begin{array}{r} .28 \text{ 2dec} \\ \times 90 \\ \hline 25.20 \text{ 2dec} \end{array}$$