

Percent Proportion

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

$$\frac{\text{is } 39}{\text{of } 77} = \frac{5}{100}$$

$$\begin{array}{l} 4 \text{ pt} \approx \underline{\quad} \text{ l.} \quad \text{p.276 Table} \\ 1 \text{ pt} \approx 0.473 \text{ l} \quad 1.8\textcircled{9}\textcircled{2} \\ \frac{4 \text{ pt}}{1} \times \frac{0.473 \text{ l}}{1 \cancel{\text{pt}}} = \underline{\quad} \text{ l} \quad 1.89 \end{array}$$

10.)

$$\frac{240,000 \text{ acres}}{3 \text{ days}} \times \frac{1 \cancel{\text{day}}}{24 \text{ hrs}} = \frac{240,000}{72} = 3333\frac{1}{3} \text{ hrs}$$

$$\frac{24 \text{ hrs}}{1 \text{ day}} \quad \frac{1 \text{ day}}{24 \text{ hrs}}$$

$$7.) 4 \text{ km} = \underline{\hspace{2cm}} \text{ yd}$$

$$\frac{1 \text{ yd}}{0.914 \text{ m}}$$

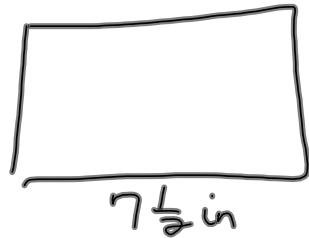
$$\frac{1.914 \text{ m}}{1 \text{ yd}}$$

$$\frac{1000 \text{ km}}{1 \text{ m}} \cdot \frac{1 \text{ m}}{1000 \text{ km}}$$

$$\frac{4 \text{ km}}{1} \times \frac{1000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ yd}}{0.914 \text{ m}} = \frac{4000}{0.914} = \underline{\hspace{2cm}} 4376 \text{ yd}$$

$$\frac{0.5 \text{ in}}{4 \text{ ft.}} = \frac{7.5 \text{ in}}{60 \text{ ft.}}$$

$$\frac{7\frac{1}{2} \text{ in}}{7.5 \text{ in}} = \frac{15}{2}$$



$$\frac{X}{12} = \frac{10}{18}$$

6 - 8 Dilations

Dilate - enlarge or reduce by a scale factor.

enlarge > 1

reduce < 1

(x, y) multiply the scale factor (k)
 $y = kx$
 (kx, ky)
 $x \text{ Scale Factor}$
 (x', y')

$$\begin{array}{lll} J(2,4) & J'(1,2) & R = \frac{1}{2} \\ K(2,6) & K'(1,3) & \text{Prime} = \text{New figure} \\ M(8,6) & M'(4,3) & \\ N(8,2) & N'(4,1) & \end{array}$$

$$\begin{array}{ccc} R(-3, 6) & S(3, 12) & T(3, 3) \\ R'(-1, 2) & S'(1, 4) & T'(1, 1) \end{array}$$

$$SF = \frac{1}{3}$$

$$-\frac{3}{1} \cdot \frac{1}{3} = -\frac{3}{3} = -1$$

$$\begin{array}{ccc} x(-3, 6) & y(3, 0) & z(3, 3) \\ x'(-9, 18) & y'(9, 0) & z'(9, 9) \end{array}$$

SF: 3

original $(3, 6)$ $(9, 6)$
new' $\frac{1}{3} \times \frac{1}{3}$ $(1, 2)$ $(3, 2)$

SF: $\frac{1}{3}$

Reduction

