

1.4.2 Rewriting Formulas

Throughout this course you will use many formulas (page 28). It will be important that you are able to rearrange them for their various variable.

The formula for the perimeter of a rectangle is $P = 2L + 2W$. Solve for 'W':

$$P = 2L + 2W$$

$$-2L \quad -2L$$

$$\frac{P-2L}{2} = \frac{2W}{2}$$

$$\frac{P-2L}{2} = W$$

The formula for the area of a triangle is $A = \frac{1}{2}bh$. Solve for 'h'.

$$A = \frac{\frac{1}{2}bh}{\frac{1}{2}b}$$

$$\frac{A}{\frac{1}{2}b} = h$$

$$\frac{2A}{b} = h$$

$$2 \cdot A = 2 \left(\frac{1}{2}bh \right)$$

$$\frac{2A}{b} = \frac{bh}{b}$$

$$\frac{2A}{b} = h$$

Volume of a Cone:

Solve for 'h': $V = \frac{1}{3}\pi r^2 h$

$$\frac{V}{\frac{1}{3}\pi r^2} = \frac{\frac{1}{3}\pi r^2 h}{\frac{1}{3}\pi r^2}$$

$$\frac{V}{\frac{1}{3}\pi r^2} = h$$

$$\frac{3V}{\pi r^2} = h$$

$$3(V) = 3\left(\frac{1}{3}\pi r^2 h\right)$$

$$\frac{3V}{\pi r^2} = \frac{\pi r^2 h}{\pi r^2}$$

$$\frac{3V}{\pi r^2} = h$$

Assignment:

p. 29

**# 24-32 even,
33-34**