National 5 Homework : 1 year course
Change the Subject of the Formula

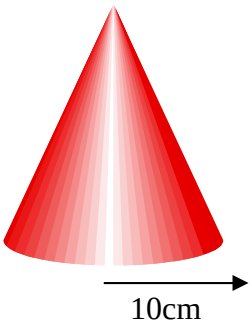
1. Make x the subject of the formulae.

(a) $x - b = 5$ (b) $12 = n - x$ (c) $\frac{x}{5} = 6$ (d) $a = \frac{d}{x}$

(e) $5x + 4 = m$ (f) $f = 5 - 2x$ (g) $\frac{x+5}{4} = m$ (h) $m = 2(x + f)$

(i) $\frac{x+y}{m} = \frac{4m}{5}$ (j) $x^2 + y = 6$ (k) $y = \frac{3}{5}(x - z)$ (l) $p = \frac{2\sqrt{x}}{3}$

2. The formula for finding the volume of the cone is $V = \frac{1}{3}\pi r^2 h$.



(a) Make h the subject of the formula.

(b) If the volume of the cylinder shown is 3140 cm³ and the radius is 10cm, find the height of the cylinder.

3. This can of Cola has a total surface area given by the formula $A = 2\pi r(r + h)$

(a) Make h the subject of the formula.

(b) If the surface area of the can is 596.6cm³ and the radius is 5cm, what is the height?