

**SANGAM SKM COLLEGE**  
**YEAR 10 : MATHEMATICS**  
**WORKSHEET 2 WEEK 3**

1. Pressure ( $P$ ) is defined as  $P = \frac{F}{A}$

- (i) Make  $A$  the subject of the formula
- (ii) If  $F = 3$  and  $P = 1/3$ , find the value of  $A$ .

2. A curved surface of a cylinder with radius,  $r$  and height,  $h$ , is given by

$$A = 2 \pi r h$$

- (i) Make  $h$  the subject
- Find the height,  $h$  when  $r = 4\text{cm}$  and the surface area is  $150 \text{ cm}^2$ .

3. If  $m = -3$ ,  $n = 2$ ,  $p = -1$ , find the value of:

- (i)  $m n$
- (ii)  $\frac{m + n}{p}$
- (iii)  $m^2 - n^2$

4. Solve each of the following equations:

(i)  $\frac{2x - 7}{3} = 5$

(ii)  $8r - 4 = 3r + 6$

(iii)  $\frac{y - 6}{2} = 7$

(iv)  $6(3 + c) = -18$

5. Solve each of the following equations:

(i)  $6m - 1 = 3m + 11$

(ii)  $\frac{3}{2 - x} = 9$

$$(iii) \quad \frac{6}{y} + 1 = 2$$