



Grade 09

Mathematics

Unit :17 - Formulae

Answer all the questions.

- 1) Length and breadth of a rectangle are X and Y respectively
- If perimeter of it denoted by P, construct a formula for perimeter (P)
  - If area of it denoted by A, construct a formula for A
- 2) Make the term given in the bracket the subject of the formula
- $C = 2\pi r$  (r)
  - $y = mx + c$  (c)
  - $\frac{1}{v} - \frac{1}{u} = \frac{1}{f}$  (u)
  - $C = \frac{5}{9}(f - 32)$  (f)
  - $S = \frac{n}{2}(a + l)$  (l)
- 3)  $C = \frac{5}{9}(f - 32)$
- Make 'f' the subject of the formula
  - If  $f = 200$  find C
- 4)  $a = \frac{bx + C}{b}$
- Make 'b' the subject of the formula
  - If  $a = (-12)$ ,  $x = 6$  and  $C = -9$ , find b
- 5)  $P = C \left(1 + \frac{r}{100}\right)$
- Make 'r' the subject of the formula
  - If  $P = 200$ ,  $C = 50$  find r

6) Volume of a cylinder can be obtained by;

Area of the base x Height

- i) If radius of the base of a cylinder is  $r$  and height of the cylinder is  $h$  and volume is  $V$  ;  
construct a formula for volume of the cylinder.
- ii) Make '  $h$  ' the subject of the formula.
- iii) If  $V = 6160$  and  $r = 14$  find the height of it.



agaram.lk