

**Ch : 1 Fundamental Concepts
&**

Ch : 2 Formulate

1. Identify monomial, binomial, trinomials : [03]
 (i) $\frac{m}{3}$ (ii) $m + 2n$ (iii) $\frac{m^2}{n^2}$ (iv) $5 + 3x + y$ (v) $2a$ (vi) $a - \frac{2}{a}$
2. Add [02]
 (i) $3x^2, 6x^2, -9x^2$ and $\frac{5}{3}x^2$ (ii) $3a^2b^4, -2a^2b^2, 5a^2b^2, 12a^2b^4, 3a^2b^2$ and $5a^2b^4$
3. Subtract [02]
 (i) $\frac{3}{2}xy$ from $\frac{5}{2}xy$ (ii) $5a - 9b$ from $7a + 10b$
4. How much smaller is $5x - 8y + 9z$ than $12x - 10y - 3z + 16$? [02]
5. If the perimeter of a triangle is $4y - 3x + 2z$ cm and two sides of a triangle measure $4x + 2y + z$ cm and $3x + 7y - 2z$ cm and, find the length of third side of triangle ? [03]
6. Multiple [10]
 (i) $\frac{-4}{7}x^2y^2$ and $\frac{-2}{5}x^2y^2z$
 (ii) $ax - by + cz$ by $2a$
 (iii) $\left(x + \frac{1}{2}\right)\left(x - \frac{1}{3}\right)$
 (iv) $x - 3y + 4$ and $5x + y - 2$
 (v) $(x + 1)(x - 1)(x + 2)$
7. Divide : [12]
 (i) $6a^4$ by $-2a$
 (ii) $-52ab^3c^5$ by $26a^3bc^2$
 (iii) $(8a^2b^3 - 6a^3b^2 + 4ab^2 - 2a + b) \div 2ab$
 (iv) $4x^2 - 4x - 17$ by $2x - 5$
 (v) $4x^3 - 8x^2 - 9x + 8$ by $2x - 3$
 (vi) $x^5 - 4x^4 - 6x^3 + 21x^2 - 24x + 26$ by $x^2 - 2x + 3$
8. Simplify : [04]
 (i) $12x - [3x - 2y - \{y - 2(x - \overline{2x + y})\}]$
 (ii) $12a$ of $\frac{1}{2} - 6a^2 \div 3a + (a + a)$
9. Make R the subject of the formula $A = P + \frac{PRT}{100}$ Also find R, when $A = 1600, P = 1000,$ and $T = 5$ [04]
10. Change the subject of the formula $R = \sqrt{\frac{3v}{\pi h}}$ to h, Also find h, when $A = 88, r = 2$ and $\pi = \frac{22}{7}$ [04]
11. Change the subject of $S = u + \frac{1}{2}f(2x - 1)$ to f. And find of when $S = 49, u = 1$ and $x = 2$ [04]

Best of Luck