Practice Questions Class - VIII

Algebraic expression & Mensuration

Test - 1
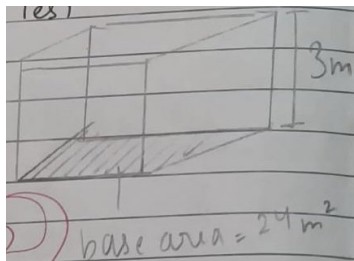
1. By what term 2pq should be multiplied to get $-14p^3q^2$?

2. Find the value of following at $x = -5$: $x(3x^2 + 2x + 5) - 10$

3. Solve : $a(a-b-c) + b(b-c-a) + c(c-a-b)$

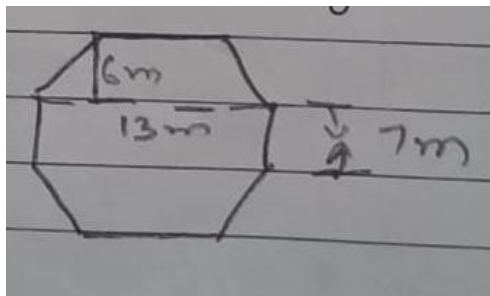4. Simplify: $(3p - 4q + 5r) + (2r - p + 3q)$

Test - 2

1. Simplify: $(5x^2 + 4y^2 - 6y - 3) + (7x^2 - 5y^2 +5x +15) - (3x^2 - 8y^2 - 2x - 3y)$

2. Find volume of cube of length 3pq, breadth 2qr and height 4rp.

3. Subtract $3ab(a-b)$ from $4ab(a+b)$.

4. Simplify and evaluate at $x = -4$: $x(x^2 + 3x + 2) -4x(x+3) -5$.

Test - 3

1. Find the volume of given figure :

2. Daniel is painting walls and ceiling of a cuboidal hall with length, breadth and height 25m, 12m and 10m. Find the required area.

3. Find the area of given regular octagon :

Test - 3

1. Case study : Rahul went to the market and purchased a beautiful box for jewellery. The external dimensions of the box are 80cm x 56cm x 40cm.

(I) Find the capacity of the box.

(II) Find the length of the ribbon required to cover it's all the edges.

(III) Howuch sheet of paper he needs to cover the box completely?

2. Case Study: The ratio of the length and breadth of a rectangular garden is 5:7, so that the length of plot is 5a and breadth is 7a.

(I) Write the polynomial that gives area of plot.

(II) If owner wants to do fencing of the garden, find out the length of the wire needed.

(III) If path to be made all around the garden and width of path is 5m, then what would be the area of new rectangle.