

Subject: Maths

Class:8

Topic: Ch.6 Algebraic Expressions

Watch video #16, and solve the following exercise:

EXERCISE 6.2

Use Cordova Smart Class Software on the smart board in class to do Exercise.

1. Find the product of the following pairs of monomials :

(i) $(2, 4x)$

(ii) $(-3x, 2x)$

(iii) $(-7p, 3p^2q)$

(iv) $(3m^2, -2m^3)$

(v) $(6x^3, 0)$

(vi) $(15xy, 2xy)$

2. Find the area of rectangles with the following pairs of monomials as their length and breadth respectively.

(i) (x^2, x^3)

(ii) $(2a^2b, 3ab)$

(iii) $(6m^2n^2p, 2mnp^2)$

(iv) $(3ab, 5bc)$

(v) $(3a, 2ab)$

(vi) $(5xy^3, \frac{2}{15}x^2y)$

3. Find the product of :

(i) xy, yz, zx

(ii) $a^2b, -2a^3b^2, ab$

(iii) $4mn^2, -2m^2n^2, -3mn^3$

(iv) $2a^3b^3, 3ab^2, -2a^2b$

(v) $2xy^2, 3x^2z, xyz$

4. Find the volume of rectangular boxes with the following length, breadth and height respectively.

(i) $7x, 5x, 2x^2$

(ii) $4x^2, 3xy, 3x$

(iii) $6p, 3q, 2r$

(iv) $4a^2, 5b^2, 2ab$

5. Simplify the following :

(i) $(-7ab) \times (2a^2bc) \times (4abc^2)$

(ii) $\left(\frac{1}{2}x^2y\right) \times \left(\frac{2}{3}xy^3\right) \times (3xy)$

(iii) $\left(\frac{3}{2}x^3y^2\right) \times \left(-\frac{2}{3}xy\right) \times (2xy^3)$

(iv) $(2a^2b^2) \times \left(-\frac{7}{2}ab\right) \times (3b)$

6. Find the product of $(x^2y) \times (-2xyz) \times (xy^3)$, also verify the result when $x = 2, y = 1, z = 3$.

7. Simplify $(3x^2y^2) (-5xyz) (-x^2y)$ and verify the result when $x = 2, y = 1, z = 1$.

8. Simplify $(pqr) (pq^3r) (p^2r)$. Also, verify the result when $p = -1, q = 2, r = -2$.

9. Find the product : $\left(\frac{1}{2}p^3q^6\right) \left(-\frac{2}{3}p^4q\right) (pq^2)$.

Also, find the value of the product if $p = 2, q = -1$.

