

Class 8 Algebraic Expressions and Identities  
CBSE TEST PAPER - 02

Type: 01

1. Factorise  $3xy + 9x^2y^3$
2. Divide  $7x^2y^2z^2 \div 21xyz$
3. Subtract  $5x^2 - 4y^2 + 6y - 3$  from  $7x^2 - 4xy + 8y^2 + 5x - 3y$ .
4. Add  $4y(3y^2 + 5y - 7)$  and  $2(y^3 - 4y^2 + 5)$
5. Simplify  $(a + b)(2a - 3b + c) - (2a - 3b)c$ .

Type: 02

1. Divide

- (i)  $x^3 - 1$  by  $x - 1$
- (ii)  $7 + 15x - 13x^2 + 5x^3$  by  $4 - 3x + x^2$

2. Evaluate

- (i)  $1.5^3 - 0.9^3 - 0.6^3$
- (ii)  $(a - b)^3 + (a + b)^3$
- (iii)  $(x + 2y - 3z)^2 + (x - 2y + 3z)^2$

3. If  $(x^4 + 1/x^4) = 47$  find the value of  $(x^3 + 1/x^3)$

4. Find the product of

- (i)  $(x^4 + 1/x^4)$  and  $(x + 1/x)$
- (ii)  $(2x^2 + 3x - 7)(3x^2 - 5x - 4)$

5. Two adjacent side of a rectangle are  $5x^2 - 3y^2$  and  $x^2 - 2xy$ . Find its perimeter

6. The perimeter of a triangle is  $6p^2 - 4p + 9$  and two of its adjacent side are  $p^2 - 2p + 1$  and  $3p^2 - 5p + 3$ . Find third side of triangle.

17. Evaluate

- (i)  $(5^{-1} \times 3^{-1})^{-1} \times 6^{-1}$
- (ii)  $(2^{3x+1} + 10) \div 7 = 6$
- (ii)  $[5^{2x+1}] / 25 = 125$
- (iv)  $(4/9)^4 \times (4/9)^{-7} = (4/9)^{2x-1}$