



**Subject: - Mathematics**

## PRACTICE PAPER

## CBSE-8<sup>th</sup>

**Topic: - Factorisation**

1. Factorize:  $9(a - 2b)^2 + 6(2b - a)$

**Ans.  $3(a - 2b)(3a - 6b - 2)$**

2. Factorize:  $4(x + y)(3a - b) + 6(x + y)(2b - 3a)$

**Ans.  $2(x + y)(4b - 3a)$**

3.  $x^2 + y - xy - x$

**Ans.  $(x - 1)(x - y)$**

4.  $16a^2b - \frac{b}{16a^2}$

**Ans.  $b\left(4a + \frac{5}{2a}\right)\left(4a - \frac{5}{2a}\right)$**

5.  $x^8 - y^8$

**Ans.  $2(1 - 5x)(1 + 5x)$**

6.  $a^{12}x^4 - a^4x^{12}$

**Ans.  $a^4x^4(a^4 + x^4)(a^2 + x^2)(a + x)(a - x)$**

7.  $x^4 - (x - z)^4$

**Ans.  $(2x^2 - 2xz + z^2)(2x - z)z$**

8.  $y^2 + 5y - 36$

**Ans.  $(y + 9)(y - 4)$**

9.  $x^2 - 21x + 108$

**Ans.  $(x - 12)(x - 9)$**

10.  $(2x + 3y)^2 - 5(2x + 3y) - 14$

**Ans.  $(2x + 3y - 7)(2x + 3y + 2)$**

11.  $(2a - b)^2 + 2(2a - b) - 8$

**Ans.  $(2a - b + 4)(2a - b - 2)$**

12.  $4y^2 - 8y + 3$

**Ans.  $(2y - 3)(2y - 1)$**

13.  $6 - x - 2x^2$

**Ans.  $(-2x + 3)(x + 2)$**