

Subject: - Mathematics

PRACTICE PAPER

CBSE-8th

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