

St. Andrews Scots Sr. Sec. School

9th Avenue, I.P. Extension, Patparganj, Delhi – 110092

Session: 2026-2027 - Worksheet

Class: VIII

Subject: Maths

Topic: Algebraic Expressions and Identities

Worksheet No:12

1. Subtracting $7x + y$ from $-x + y$ gives

- (a) $6x + 2y$ (b) $8x + 2y$ (c) $-8x$ (d) $8x$

2. Use suitable identity to evaluate 99^2 .

- (a) 9801 (b) 10199 (c) 10201 (d) 10001

3. Evaluate $(4x + y)^2$ by suitable identity

- (a) $4x^2 + y^2 + 8x$ (b) $4x + y + 8xy$
(c) $16x^2 + y^2 + 8xy$ (d) $16x^2 + y^2 + 8$

4. Find the value of 95×102 by suitable identity.

- (a) 10310 (b) 10290 (c) 10690 (d) 9690

5. Simplification of $(t + s^2)(t^2 - s)$ is

- (a) $t^3 + s^3 - s^2t^2 - ts$ (b) $t^3 - s^3 + s^2t^2 - st$ (c) $t^3 - s^3 + s^2t^2 + st$ (d) $t^3 + s^3 - s^2t^2 + st$

6. Using identity $a^2 - b^2 = (a + b)(a - b)$, find $4^2 - 6^2$

- (a) -20 (b) 20 (c) -12 (d) 12

7. The expression in one variable is

- (a) $x + x^2 + 1$ (b) $x + y$ (c) $x + 9y$ (d) xyz

8. If $ab = 6$ and $a + b = 5$ then the value of $(a^2 + b^2)$ is

- (a) 11 (b) 12 (c) 13 (d) 16

9. If $x - y = 7$ and $xy = 9$, then the value of $(x^2 + y^2)$ is

- (a) 64 (b) 67 (c) 63 (d) none of these

10. Find the value of the expression $(81x^2 + 16y^2 - 72xy)$, when $x = \frac{2}{3}$, $y = \frac{3}{4}$.

- (a) 5 (b) 7 (c) 9 (d) 11