

**Dr. M.K.K. ARYA MODEL SCHOOL, PANIPAT**  
**MATHS ASSIGNMENT**  
**CLASS – VIII**  
**CH - 9(Algebraic Expressions)**

1. Solve:  $(t - 3)^2 - (t + 3)^2$
2. If  $(x + \frac{1}{x}) = 5$ , find the value of  $(x^2 + \frac{1}{x^2})$ .
3. Find the value of x, if  $13x = (58)^2 - (45)^2$ .
4. If  $(x + 4)(x + 1) - (x - 1)(x - 2) = 0$  .What is the value of x.
5. Simplify:  $(-2xy)(-3x^3y^2)(-\frac{1}{6}x^2y^7)$ .
6. Two adjacent sides of a rectangle are  $3x^2 - 5y^2$  and  $7x^2 - xy$ . Find its perimeter.
7. If  $x + y = 9$  and  $xy = 16$ , find the value of  $(x^2 + y^2)$ .
8. Simplify:  $179 \times 179 - 21 \times 21$ .
9. If  $x^2 + \frac{1}{x^2} = 27$ , find  $x + \frac{1}{x}$ .
10. Find the value of the expression:  $25x^2 + 70x + 49$  for  $x = -1$
11. Solve using identity:  $(a + 1)(a - 1)(a^2 + 1)$
12. Simplify:  $x(y - z) + y(z - x) + z(x - y)$
13. Simplify :  $(5x - 7)(2x + 3)(7x - 8)$
14. Using identity evaluate  $1001 \times 991$
15. Simplify  $4.359 \times 4.359 - 1.641 \times 1.641$   
 $4.359 - 1.641$
16. What must be subtracted from  $x^4 + 6x^3 + 13x^2 + 13x + 8$  so that the resulting polynomial is exactly divisible by  $(x^2 + 3x + 2)$ .