

1. How many terms are there in the expression  $4x + 5y$ .
2. What is numerical coefficient of  $y$  in the expression  $x - y$ .
3. What is the degree of the polynomial  $6x - 5 + 6x^2 - x^4$  ?
4. What is the value of  $(x - y)(x + y) + (y - z)(y + z)$  ?
5. What is the degree of a constant polynomial?
6. What is the value of  $x^2 + y^2 - 10$  at  $x = 0$  and  $y = 0$  ?
7. Simplify  $(a + b + c)(a + b - c)$ .
8. Using identities evaluate:  $8.60 \times 11.60$ .
9. Evaluate:  $\left(x + \frac{1}{x}\right)\left(x - \frac{1}{x}\right)\left(x^2 + \frac{1}{x^2}\right)\left(x^4 + \frac{1}{x^4}\right)$ .
10. Simplify:  $0.63 \times 0.63 + 2 \times 0.63 \times 0.37 + 0.37 \times 0.37$ .
11. Solve:  $7x^2(2x + 1) + 10x^3(x + 1)$
12. Show that  $x(y - z) + y(z - x) + z(x - y) = 0$ .
13. Show that  $a(b - c) + b(c - a) + c(a - b) = 0$ .
14. Subtract  $3pq(p - q)$  from  $6pq(p + q)$ .
15. Solve:  $(3x - y)^2 + 3x(2x + y)^2$ .
16. Find the value of the product  $(5x^2 - 10x)$  and  $(-6x^3)$  at  $x = 0$ .