



## INDIAN SCHOOL AL WADI AL KABIR

Dept. of Mathematics 2021 – 2022

Class X – Polynomials (1)

MCQ Work Sheet



1	The polynomial whose zeroes are $-5$ and $4$ is : (A) $x^2 - 5x + 4$ (B) $x^2 + 5x - 4$ (C) $x^2 + x - 20$ (D) $x^2 - 9x - 20$
2	If $\alpha$ and $\beta$ are the zeroes of the polynomial $2x^2 + 5x + 1$ , then the value of $\alpha + \beta + \alpha\beta$ is (A) $-2$ (B) $-1$ (C) $1$ (D) $3$
3	If $-1$ is a zero of the polynomial $f(x) = x^2 - 7x - 8$ , then the other zero is : (A) $6$ (B) $8$ (C) $-8$ (D) $1$
4	The number of zeroes of a cubic polynomial is : (A) more than $3$ (B) atmost $3$ (C) only $3$ (D) None
5	The graph of the polynomial $f(x) = 2x - 5$ is a straight line which intersects the $x$ -axis at exactly one point namely : (A) $\left(\frac{-5}{2}, 0\right)$ (B) $\left(0, \frac{-5}{2}\right)$ (C) $\left(\frac{5}{2}, 0\right)$ (D) $\left(\frac{5}{2}, \frac{-5}{2}\right)$
6	In the given figure, the number of zeroes of the polynomial $f(x)$ are (A) $1$ (B) $2$ (C) $3$ (D) $4$
Q6	
Q7	
7	In the given figure, the number of zeroes of the polynomial $f(x)$ are (A) $1$ (B) $2$ (C) $3$ (D) $4$
8	If $\alpha$ and $\beta$ are zeroes of the polynomial $p(x) = x^2 - 5x + 6$ , then the value of $\alpha + \beta - 3\alpha\beta$ is (A) $-5$ (B) $-13$ (C) $13$ (D) $6$
9	If $\alpha$ and $\beta$ are zeroes of the polynomial $2x^2 - 5x + 7$ , then the value of $\alpha^{-1} + \beta^{-1}$ is (A) $\frac{7}{2}$ (B) $-\frac{5}{2}$ (C) $-\frac{5}{7}$ (D) $\frac{5}{7}$
10	If one zero of the quadratic polynomial $x^2 + 3x + k$ is $-5$ , then the value of $k$ is : (A) $10$ (B) $-10$ (C) $15$ (D) $-15$
11	If $\alpha, \beta$ are zeroes of $p(x) = x^2 - 5x + k$ and $\alpha - \beta = 1$ , the value of ' $k$ ' is : (A) $4$ (B) $-6$ (C) $6$ (D) $5$

12	If the sum of the zeroes of the polynomial $p(x) = (k^2 - 14)x^2 - 2x - 12$ is 1, then k takes the value(s) : (A) $\sqrt{14}$ (B) $-14$ (C) $2$ (D) $\pm 4$
13	If $\alpha$ and $\beta$ are zeroes of $p(x) = 2x^2 - x - 6$ , then the value of $\alpha^{-1} + \beta^{-1}$ is : (A) $\frac{1}{6}$ (B) $-\frac{1}{6}$ (C) $\frac{1}{2}$ (D) $-\frac{1}{3}$
14	The sum and product of the zeroes of the polynomial $9x^2 - 5$ respectively are : (A) $0, -\frac{9}{5}$ (B) $0, \frac{9}{5}$ (C) $0, \frac{5}{9}$ (D) $0, -\frac{5}{9}$
15	If one zero of the quadratic polynomial $2x^2 + kx - 5$ is 5, then the other zero is : (A) $-9$ (B) $9$ (C) $\frac{1}{2}$ (D) $-\frac{1}{2}$
16	If $\sqrt{\frac{5}{3}}$ and $-\sqrt{\frac{5}{3}}$ are the zeroes of a polynomial $p(x)$ , then $p(x)$ is (A) $25x^2 - 9$ (B) $3x^2 - 5$ (C) $x^2 - 25$ (D) $9x^2 - 25$
17	Sum and product of the zeroes of polynomial $x^2 - 3$ are respectively : (A) $-3, 0$ (B) $0, -3$ (C) $0, 3$ (D) $3, 0$
18	The zeroes of the polynomial $10x^2 - 30x$ are : (A) $10, 3$ (B) $0, -3$ (C) $0, 3$ (D) $10, 0$
19	If the zeroes of a quadratic polynomial are equal in magnitude but opposite in sign then : (A) sum of its zeroes is 0      (B) product of its zero is 0 (C) one of the zero is 0      (D) there are no zeroes of the polynomial
20	If one zero of the quadratic polynomial $2x^2 + kx - 15$ is 3, then the other zero is (A) $-15$ (B) $\frac{-15}{2}$ (C) $\frac{-5}{2}$ (D) $k$