

- Q1. Which of the following is not a zero of the polynomial $p(x) = x^3 - 7x + 6$?
 (A) 1 (B) 2 (C) -3 (D) -2 Ans. (D)
- Q2. Which of the following is the zero of the polynomial $x^3 - 8$?
 (A) -2 (B) 0 (C) 2 (D) $\sqrt{2}$ Ans. (C)
- Q3. Determine the degree of the polynomial $(x + 1)(x^2 - x - x^4 + 1)$. Ans. 5
- Q4. If α and β are the zeroes of $x^2 + 5x + 8$, then value of $(\alpha + \beta)$ is Ans. -5
- Q5. The sum of the roots of the quadratic equation $2x^2 + 14x + 24 = 0$ is Ans. -7
- Q6. One zero of the polynomial $x^2 + 11x + k$ is -3, find the value of k and the other zero. Ans. $k = 24$; -8
- Q7. One of the zero of the polynomial $p(x) = (k - 1)x^2 - kx + 1$ is -3, find the value of k. Ans. $\frac{2}{3}$
- Q8. Polynomial of degree 0 is called Ans. Constant polynomial
- Q9. Polynomial of degree 1 is called Ans. Linear polynomial
- Q10. Polynomial of degree 2 is called Ans. Quadratic polynomial
- Q11. Polynomial of degree 3 is called Ans. Cubic polynomial
- Q12. Polynomial of degree 4 is called Ans. Biquadratic polynomial
- Q13. Any graph which touches the x - axis at two distinct points has zeroes. Ans. two
- Q14. Any graph which touches the x - axis at three distinct points has zeroes. Ans. Three
- Q15. If the sum of zeroes of the quadratic polynomial $3x^2 - kx + 6$ is 3, then find the value of k. Ans. 9
- Q16. If the sum of zeroes of the polynomial $p(x) = (k^2 - 14)x^2 - 2x - 12$ is 1, then find the value of k. Ans. ± 4
- Q17. If the sum of the zeroes of the polynomial $2x^3 - 3kx^2 + 4x - 5$ is 6, then find the value of k. Ans. 4
- Q18. If the product of two zeroes of the polynomial $p(x) = 2x^3 + 6x^2 - 4x + 9$ is 3, find the third zero. Ans. $-\frac{3}{2}$
- Q19. If α and β are the zeroes of $x^2 + x + 1$, then $\frac{1}{\alpha} + \frac{1}{\beta}$ is equal to : Ans. -1
- Q20. If α and β are the zeroes of the $p(x) = 4x^2 - 2x - 3$, find the value of $\frac{1}{\alpha} + \frac{1}{\beta}$. Ans. $-\frac{2}{3}$
- Q21. If α, β are the zeroes of the polynomial $5x^2 - 7x + 2$, then sum of their reciprocals is : Ans. $\frac{7}{2}$
- Q22. Two zeroes of the polynomial $p(x) = 4x^2 - 12x + 9$ are : Ans. $\frac{3}{2}, \frac{3}{2}$
- Q23. Find the zeroes of $3x^2 - x - 4$ and verify the relationship between the zeroes and the coefficients. Ans. $\frac{4}{3}, -1$
- Q24. Find the zeroes of $p(x) = 2x^2 - x - 6$ and verify the relationship between zeroes and coefficients. Ans. $2, -\frac{3}{2}$
- Q25. Find the zeroes of $6x^2 - 3 - 7x$ and verify the relationship between the zeroes and the coefficients. Ans. $\frac{3}{2}, -\frac{1}{3}$

