

- Q1. Verify that $2, -2, -\frac{3}{2}$ are the zeroes of the cubic polynomial $p(x) = 2x^3 + 3x^2 - 8x - 12$.
- Q2. Find the zeroes of the polynomial $2x^2 + 2x - 12$ and verify the relationship between the zeroes and the coefficients.
- Q3. Find the zeroes of the polynomial $4x^2 + 8x$ and verify the relationship between the zeroes and the coefficients.
- Q4. If -2 is a zero of the polynomial $p(x) = x^4 - (2a + 3)x^2 - 2(a - 1)x + 12$, then find the value of a .
- Q5. If α, β are the zeroes of the quadratic polynomial $x^2 - 7x + 10$, then find the value of $\alpha^3 + \beta^3$.
- Q6. Find a quadratic polynomial whose zeroes are -6 and $-\frac{2}{3}$.
- Q7. Find all the zeroes of the polynomial $2x^4 + 7x^3 - 19x^2 - 14x + 30$, if two of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$.
- Q8. Divide $x^3 - 3x^2 - 3x + 1$ by $x+1$ and hence verify the division algorithm.