

1. Show that $(x - 1)$ is a factor of the polynomial
 $f(x) = 2x^3 - 3x^2 + 7x - 6$.
2. Evaluate 105×93
3. Factorise: $\left(5a + \frac{2}{3}\right)^2 \left(2a - \frac{1}{3}\right)^2$
4. Factorise: $125x^3 + 27y^3 + 8z^3 - 90xyz$
5. Check whether the polynomial $p(x) = 3x^4 + 4x^3 - 10x^2 - 5x - 30$ is a multiple of $(x - 2)$ and $(x + 3)$.
6. If the polynomials $f(x) = x^4 - 2x^3 + 3x^2 - 9x + 3a - 7$, when divided by $(x + 1)$ leaves the remainder 20, then find the value of a . Also find the remainder when $f(x)$ is divided by $(x + 2)$.
7. Factorise: $x^3 + x^2 - 4x - 4$
8. If $x^2 + \frac{1}{x^2} = 7$, find the value of $x^3 + \frac{1}{x^3}$
9. Show that $(2x + 1)$ is a factor of $2x^3 - 11x^2 - 4x + 1$
10. Find the remainder, when $x^3 - 3x^2 + 3x - 1$ is divided by $(x - 1)$