

test
polynomials

1) Find the value of $p(-2)$ if $p(x) = 2x^2 - 2x + 1$

2) Find the remainder obtained on dividing $(8x^3 + 4x^2 + 2x + 1)$ by $(2x + 1)$

3) Find the value of 'a' if $y^4 - 3y^3 + 4y - 6ay^2 + 1$ leaves remainder 10 when divided by $y + 1$.

4) Write the identity you will use to multiply 1002 by 1003.

5) evaluate: $(2x - 3y)^2$

6) evaluate: $(2x+3y)^2 - (2x-3y)^2$

7) evaluate: $(2x-1)^3$

8) evaluate: $30^3 - 20^3 - 10^3$

9) simplify: $\frac{7.83 \times 7.83 - 1.17 \times 1.17}{6.66}$

10) For what value of k the polynomials $x^5 - 2x^4 + kx^3 - 7x^2 + 2x - 11$ and $5x^3 - 7x^2 + 2x - k$ leave the same remainder when divided by $x - 1$?

11) Factorize: $x^2 + 5x - 6$

12) Factorize: $a^3 + 27b^3$

13) Volume of cube is $x^3 + 2x^2 + \frac{4x}{3} + \frac{8}{27}$. Find length of its side.

14) factorise: $x^3 + 6x^2 + 11x + 6$

15) Find zero of $3x - 2$.

16) Is $x + 1$ a factor of $x^4 - x^3 + x^2 - x + 1$?

17) Write identity: $a^3 + b^3$

18) Write identity: $a^3 + b^3 + c^3 - 3abc$

19) expand: $(-a + b - c)^2$

20) Find the product of $(2x + 3)(2x - 1)$

end