

Delhi public school Jammu

Assignment (2024-25)

Topic:

Subject: Mathematics

1. Numbers System.

2. Polynomial

Class 9th

1. Find 5 rational numbers between $-1/2$ and $1/2$.
2. Find 5 irrational numbers between $1/3$ and $2/7$.
3. Represent $\sqrt{3}$ and $\sqrt{2}$ on number line.
4. Rationalise the denominator $\frac{\sqrt{3}-1}{2\sqrt{3}-3\sqrt{2}}$
5. Simplify $(512)^{2/3}$. and $(32)^{2/5}$.
6. Represent $\sqrt{9.3}$ on number line.
7. Find degree and number of zeroes

a) $x^2 + 2x + 1$ b) $x^3 - 12$ c) $x^4 + 2$

8. find $f(0)$, $f(1)$ and $f(2)$ for polynomial $f(x) = x^3 + x^2 - x - 1$
9. find remainder $x^3 + 3x^2 + 3x + 1$ is divided by $x + 1$.
10. Find k if $x - 1$ is factor of $p(x) = x^2 + x + k$.
11. factorize $x^3 - 2x^2 - x + 2$.

12. solve

a) $(3x + 4)(3x - 5)$ b) 95×96 c) $(x + 2y + 4z)^2$

13. factorize

a) $2x^2 + y^2 + 8z^2 - 2\sqrt{2}xy + 4\sqrt{2}yz - 8xz$.

b) $8x^3 + y^3 + 12x^2y + 6xy^2$