



DHIVYA MATRIC. HR. SEC. SCHOOL, CHETPET.

Find the GCD of $x^3 - 30x^2 + 60x - 48$ and $3x^3 - 12x^2 + 21x - 18$.

Discuss the nature of solution of the system of equations $\frac{y+z}{4} = \frac{z+x}{3} = \frac{x+y}{2}$; $x+y+z=27$.

If $A = \frac{2x+1}{2x-1}$, $B = \frac{2x-1}{2x+1}$ and then find $\frac{1}{A-B} - \frac{2B}{A^2-B^2}$.

If $x = \frac{a^2+3a-4}{3a^2-3}$ and $y = \frac{a^2+2a-8}{2a^2-2a-4}$ then find the value of x^2y^{-2} .

Solve $3x+y-3z=1$; $-2x-y+2z=1$; $-x-y+z=2$.

Rekha has 15 square colour papers of sizes 10cm, 11cm, 12cm, ..., 24cm.

How much area can be decorated with these colour papers?

Find the sum to n terms of the series $3 + 33 + 333 + \dots$ to n terms.

In a G.P. the product of three consecutive terms is 27 and the sum of the product of two terms taken at a time is $\frac{57}{2}$.

Find the three terms.

The houses of a street are numbered from 1 to 49. Senthil's house is numbered such that the sum of numbers of the houses prior to Senthil's house is equal to the sum of numbers of the houses following Senthil's house.

Find Senthil's house number?

Find the sum of all natural numbers between 602 and 754 which are not divisible by 4.

In an A.P. sum of the four consecutive terms is 28 and their sum of their squares is 276.

Find the four numbers.

The ratio of 6th and 8th term of an A.P. is 7:9. Find the ratio of 9th term to 13th term.

The sum of first n , $2n$, and $3n$ terms of an A.P. are S_1 , S_2 and S_3 respectively. Prove that $S_3 = 3(S_2 - S_1)$.

There are 12 pieces of five, ten and twenty rupee currencies whose total value is Rs.105.

When first 2 sorts are interchanged in their numbers its value will be increased by Rs.20.

Find the number of currencies in each sort.

