

Aptitude Assignment-II

By Parth Patel

- [1] What quantity of water should be added to the milk water mixture so that the milk water ratio changes from 2:3 to 4:11. The quantity of milk in the mixture is 40 litres?

Ans: 50 liter

The amount of water at initial state is 60 liter and milk is 40 liter. So, we add 50 liter of water then amount of total water is 110 liter. Therefore, milk to water ratio is $40/110=4/11$.

- [2] Linear equation $2x+3y=0$ meets the x & y-axis at the point?

Ans: (0,0). It will pass through origin (0,0).

- [3] a & b are positive integers such that $a^2-b^2=19$. Find a & b?

Ans: $a=10$ and $b=9$.

$(a-b)(a+b)=19$. It means $(a-b)=1$ and $(a+b)=19$. If we solve this then $a=10$ and $b=9$.

- [4] Find $a^3+b^3+c^3+3abc$, where $a+b+c=5$ & $a^2+b^2+c^2=10$?

Ans: Given data is not enough to find a solution. If $a^3+b^3+c^3-3abc$ then solution: 12.5

- [5] Sum of two, two-digit numbers is a perfect square. The digits of the first two-digit number are two consecutive positive integers; also, when the digits of the first number are reversed, the second number is formed. Find these numbers & the square root of their sum.

Ans: 56 and 65.