

## Aptitude Assignment 2

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?

**Answer:** 20 litres of water should be added to the mixture to change the milk-water ratio from 2:3 to 4:11.

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

**Answer:** x and y axes is (0,0)

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

**Answer:** a and b are 5 and 4

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

**Answer:**  $a^3+b^3+c^3+3abc=24$ .

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.

**Answer:** the two-digit numbers are 12 and 21, and the square root of their sum is 33.