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?

Solution : 50 liters of water should be added to the milk-water mixture to change the milk-water ratio from 2:3 to 4:11.

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

Solution : linear equation 2x + 3y = 0 intersects both the x-axis and y-axis at the origin, which is the point (0, 0).

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

Solution : a = 10 and b = 9.

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

Solution : 12.5.

1. 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

Solution : there are no two-digit numbers satisfying the given conditions, and we cannot find the numbers or the square root of their sum