

1. The difference of two natural numbers is 5 and the difference of their reciprocals is $\frac{1}{10}$. Find the numbers.
2. The sum of squares of two consecutive odd numbers is 394. Find the numbers.
3. A train takes 2 hours less for a journey of 300 km, if its speed is increased by 5 km/h from its usual speed. Find the usual speed of the train.
4. Seven years ago, Varun's age was five times the square of Swati's age. Three years hence, Swati's age will be two – fifth of Varun's age. Find their present ages.
5. A two digit number is such that the product of its digits is 18. When 63 is subtracted from the number, the digits interchange their places. Find the number.
6. A motorboat whose speed in still water is 18 km/h, takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream.
7. The sum of squares of two consecutive odd numbers is 394. Find the numbers.
8. The sum of the squares of two consecutive multiples of 7 is 637. Find the multiples.
9. Two pipes running together can fill a cistern in $3\frac{1}{13}$ minutes. If one pipe takes 3 minutes more than the other to fill it, find the time in which each pipe would fill the cistern.
10. One – fourth of a herd of camels was seen in the forest. Twice the square root of the herd had gone to mountains and the remaining 15 camels were on the bank of a river. Find the total number of camels.