

Class 10 Quadratic Equation - Word problems

1. A passenger train travels 132km/hr between Agra and Delhi at a uniform speed. If the speed of the train is increased by 11km/hr, the journey takes 1 hour less. Find the original speed of the train. Ans - 33km/hr
2. The sum of the squares of two consecutive odd positive integers is 290. Find the integers. Ans – 11 and 13
3. The length of a rectangular garden is 2 meters more than twice its breadth. If the area of the garden is 300 m^2 , find its dimensions. Ans – 10 m and 22 m
4. The sum of the ages of a father and his son is 45 years. Product of their ages (in years) 5 years ago was 124. Find their present ages. Ans – 9 and 36 years
5. : The speed of a boat in still water is 18 km/hr. It takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream. Ans 6km/hr
6. Question: A two-digit number is such that the product of its digits is 12. When 36 is added to the number, the digits interchange their places. Find the original number.
Ans 26
7. The tens digit of a two-digit number is less than its units digit by 3. If the sum of the squares of the digits is 45, find the number. Ans – 36
8. The sum of the ages of a mother and her daughter is 35 years. The product of their ages 3 years hence (in the future) will be 360. Find their present ages. Ans – 6 and 29 year
9. A girl is twice as old as her younger sister. Five years ago, the product of their ages was 25. Find their present ages. Ans - 7.5 and 15 year
10. A group of students hired a private bus for a picnic for a total fixed fare of Rs 2000. Because 5 students failed to turn up, the fare for each remaining student increased by Rs 20. Find the original number of students who planned to go. Ans -25