

Class – 10th

Chapter-3

Subject Maths

Worksheet-06

Polynomials

1. Find the roots of the equation $5x^2 - 6x - 2 = 0$ by the method of completing the square.
2. Find the roots of $4x^2 + 3x + 5 = 0$ by the method of completing the square.

Find the roots of the following quadratic equations, if they exist, by the method of completing the square: (Q3-Q6)

3. $2x^2 - 7x + 3 = 0$
4. $2x^2 + x - 4 = 0$
5. $3x^2 - 5x + 2 = 0$
6. $x^2 + 4x + 5 = 0$
7. The diagonal of a rectangular field is 60 metres more than the shorter side. If the longer side is 30 metres more than the shorter side, find the sides of the field.
8. Sum of the areas of two squares is 468 m^2 . If the difference of their perimeters is 24 m, find the sides of the two squares.
9. A train travels 360 km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less for the same journey. Find the speed of the train.
10. Find two consecutive odd positive integers, sum of whose squares is 290.