

QUADRATIC EQUATIONS

sameer gupta (sameergupta@sriprakashschools.com)

August 3, 2023

10th Maths - Chapter 4

This is Problem-2.2 from Exercise 4.1

1. Represent the following situations in the form of quadratic equations :
The product of two consecutive positive integers is 306. We need to find the integers.

Solution: :

Required quadratic equation is :

Let integers be n and $(n+1)$

$$n(n+1) = 306 \quad (1)$$

$$n^2 + n - 306 = 0 \quad (2)$$

$$(n+17)(n-16) = 0 \quad (3)$$

$$(4)$$

Therefore, $n=16$ and integers are 16 and 17.