Squares and Square Roots Ex 3.1 Q9

Answer :

We know that 10^2 is equal to 100 and 9^2 is equal to 81.
Since 10 and 9 are consecutive numbers, there is no perfect square between 100 and 81. Since 100 is the first perfect square that has more than two digits, 81 is the greatest two-digit perfect square.

Squares and Square Roots Ex 3.1 Q10

Answer :

Let us make a list of the squares starting from 1.
$1^2 = 1$
$2^2 = 4$
$3^2 = 9$
$4^2 = 16$
$5^2 = 25$
$6^2 = 36$
$7^2 = 49$
$8^2 = 64$
$9^2 = 81$
$10^2 = 100$
The square of 10 has three digits. Hence, the least three-digit perfect square is 100.

Squares and Square Roots Ex 3.1 Q11

Answer :

Prime factorisation of 4851:
4851 = 3 x 3 x 7 x 7 x 11

3	4851
3	1617
7	539
7	77
11	11
	1

Grouping them into pairs of equal factors:
4851 = (3 x 3) x (7 x 7) x 11
The factor, 11 is not paired. The smallest number by which 4851 must be multiplied such that the resulting number is a perfect square is 11.

********** END **********