Q16

Answer :

Let the number of students be x.
Hence, the amount contributed by each student is Rs x.

Total amount contributed $= x \times x = x^2 = 1156$

$1156 = 2 \times 2 \times 17 \times 17$
$x = \sqrt{1156} = 2 \times 17 = 34$

Thus, the strength of the class is 34.

Q17

Answer :

The smallest number divisible by each of these numbers is their L.C.M.
L.C.M. of 6, 9, 15, 20 = 180

Resolving into prime factors:
$180 = 2 \times 2 \times 3 \times 3 \times 5$
To make it a perfect square, we multiply it with 5.

Required number = $180 \times 5 = 900$

Q18

Answer :

The smallest number divisible by each of these numbers is their L.C.M.
L.C.M. of 8, 12, 15, 20 = 120

Resolving into prime factors:
$120 = 2 \times 2 \times 2 \times 3 \times 5$

To make this into a perfect square, we need to multiply the number with $2 \times 3 \times 5 = 30$.

Required number = $120 \times 30 = 3600$

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