Q10

Answer :

Resolving into prime factors:

$$11025 = 3 \times 3 \times 5 \times 5 \times 7 \times 7$$

$$\therefore \sqrt{11025} = 3 \times 5 \times 7 = 105$$

Q11

Answer :

Resolving into prime factors:

$$15876 = 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 7 \times 7$$

$$\therefore \sqrt{15876} = 2 \times 3 \times 3 \times 7 = 126$$

Q12

Answer :

Resolving into prime factors:

$$17424 = 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 11 \times 11$$

$$\therefore \sqrt{17424} = 2 \times 2 \times 3 \times 11 = 132$$

Q13

Answer :

Resolving into prime factors:

$$252 = 2 \times 2 \times 3 \times 3 \times 7$$

Thus, the given number must be multiplied by 7 to get a perfect square.

New number = $252 \times 7 = 1764$

$\therefore \sqrt{1764} = 2 \times 3 \times 7 = 42$

Q14

Answer :

Resolving into prime factors:

$$2025 = 3 \times 3 \times 5 \times 5 \times 13$$

13 is the smallest number by which the given number must be divided to make it a perfect square.

New number = $2025 \div 13 = 225$

$\sqrt{225} = 3 \times 5 = 15$

Q15

Answer :

Let the number of rows be x.
Therefore, the number of plants in each row is also x.
Total number of plants $= (x \times x) = x^2 = 1225$
$x^2 = 1225 = 5 \times 5 \times 7 \times 7$
$x = \sqrt{1225} = 5 \times 7 = 35$

Thus, the number of rows is 35 and the number of plants in each row is 35.

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