

Assignment on Square roots

Question 1

Find the square root of each of the following numbers by using the method of prime factorization:

- a. 121
- b. 441
- c. 625
- d. 729
- e. 1521
- f. 2025
- g. 4096
- h. 5776
- i. 8100
- j. 9216
- k. 11236
- l. 15876
- m. 18496

Question 2.

Find the smallest number by which following number must be multiplied to get a perfect square. Also, find the square root of the perfect square so obtained.

- a) 1008
- b) 1280
- c) 1875

Question 3.

676 students are to be sit in a hall in such a way that each row contains as many students as the number of rows. Find the number of rows and the number of students in each row.

Question 4.

What could be the possible 'one's' digits of the square root of each of the following numbers?

(i) 1801

(ii) 856

(iii) 1008001

(iv) 6577525

Answer

i) 1 and 9.

Explanation: Since 1^2 and 9^2 give 1 at unit's place, so these are the possible values of unit digit of the square root.

ii) 4 and 6

Explanation: Since, $4^2 = 16$ and $6^2 = 36$, hence, 4 and 6 are possible digits

iii) 1 and 9

iv) 5

Explanation: Since, $5^2 = 25$, hence 5 is possible.

Question 5.

The students of a class arranged a gift for the class teacher. Each student contributed as many rupees as the number of students in the class. If the total contribution is Rs 1521, find the strength of the class.