Some questions for practice

1. Find the square root of 6400.

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

   (i) 9801   (ii) 99856   (iii) 998001   (iv) 657666025

3. Without doing any calculation, find the numbers which are surely not perfect squares.

   (i) 153   (ii) 257   (iii) 408   (iv) 441

4. Is 90 a perfect square? Justify your answer.

5. Is 2352 a perfect square? If not, find the smallest multiple of 2352 which is a perfect square. Find the square root of the new number.

6. Find the smallest number by which 9408 must be divided so that the quotient is a perfect square. Find the square root of the quotient.

7. Find the smallest square number which is divisible by each of the numbers 6, 9 and 15.

8. Find the square roots of 100 and 169 by the method of repeated subtraction.

9. Find the square roots of the following numbers by the Prime Factorisation Method.

   (i) 729   (ii) 400   (iii) 1764   (iv) 4096

   (v) 7744   (vi) 9604   (vii) 5929   (viii) 9216

   (ix) 529   (x) 8100

10. For each of the following numbers, find the smallest whole number by which it should be multiplied so as to get a perfect square number. Also find the square root of the square number so obtained.

(i) 252   (ii) 180   (iii) 1008   (iv) 2028

(v) 1458   (vi) 768

11. For each of the following numbers, find the smallest whole number by which it should be divided so as to get a perfect square. Also find the square root of the square number so obtained.

(i) 252   (ii) 2925   (iii) 396   (iv) 2645

(v) 2800   (vi) 1620

12. The students of Class VIII of a school donated Rs. 2401 in all, for Prime Minister's National Relief Fund. Each student donated as many rupees as the number of students in the class. Find the number of students in the class.

13. 2025 plants are to be planted in a garden in such a way that each row contains as many plants as the number of rows. Find the number of rows and the number of plants in each row.

14. Find the smallest square number that is divisible by each of the numbers 4, 9 and 10.

15. Find the smallest square number that is divisible by each of the numbers 8, 15 and 20.

16. By repeated subtraction of odd numbers starting from 1, find whether the following numbers are perfect squares or not? If the number is a perfect square then find its square root.

(i) 121   (ii) 55   (iii) 36   (iv) 49   (v) 90

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