



8th – Square & Square Root II

To find square root by successive Subtraction Method

- Find by successive subtraction, the square root of 121.
(a) Without doing any calculation finds which of the following numbers not perfect squares are. (i)173 (ii) 9604 (c) 9216 (d) 31000

To find square root by Division Method

- Find by division method the square root of 97344.
- Find the square root of the following by division method:
(a) 4489 (b) 7921 (c) 5776

To find the numbers of digits in the square root without calculating the square root:

- Without calculating the square root, find the number of digits in the square root of the following numbers. (a) 36864 (b) 1960000 (c) 271441

1. Find the square root of:

- (a) $\frac{196}{225}$ (b) $\frac{67}{1121}$

2. What would be the possible ones digit of the square root of the following natural numbers?

- (i) 6561 (b) 24336 (c) 16129 (d) 160801

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

- (a) 12667 (b) 608 (c) 1990 (d) 16900

4. Is 2352 a perfect square? If not, find the smallest number of which we multiply 2352 to make it a perfect square. Find the square root of the new number.

5. Find the square root by Prime Factorization methods.

- (a) 676 (b) 1024 (c) 27225 (d) 7744 (e) 9604

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

7. Find the smallest whole number by which 2925 should be divided so as to get a perfect square.

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

9. A rectangular field is 81 m long and 49 m wide. A square has the same area as that of the rectangular field. Find the side of the square.

10. Find the greatest 5-digit number which is a perfect square.

11. Find the least number of four digits which is a perfect square.

12. What is the fraction which when multiplied by itself gives 0.1764

13. The area of a square field is 1892.25 sq.m. Find the side of the square field.

14. Find the smallest number by which 14283 must be divided so that the resulting number is a perfect square.

15. By What number should 8820 be multiplied to get a perfect square in each case? Also, find the number whose square is the new number.

16. The product of two numbers is 1575 and their quotient is 9/7. Find the numbers.

17. A society collected Rs. 92.16 Each member collected as many paise as there were members. How many members were there and how much did each contribute?

18. A PT teacher wants to arrange maximum possible numbers of 6000 students in a field such that the number of rows is equal to the numbers of columns. Find the numbers of rows if 71 were left out after arrangement.

19. Without adding, find the sum of 1+3+5+7+9