Q.1: How many numbers lie between squares of the following numbers?

(i) 12 and 13

(ii) 25 and 26

(iii) 99 and 100

Q.2: Write a Pythagorean triplet whose one member is:

(i) 6

(ii) 14

(iii) 16

(iv) 18

Q.3: (n+1)2-n2 = ?

Q.4: Show that 121 is the sum of 11 odd natural numbers.

Q.5: Show that the sum of two consecutive natural numbers is 132.

Q.6: Use the identity and find the square of 189.

(a – b)2= a2 – 2ab + b2

Q.7: What would be the square root of 625 using the identity (a +b)2 = a2 + b2 + 2ab?

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

9.   The students of Class VIII of a school donated Rs 2401 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.

Q.10: Find the square root of 729 using factorisation method.

Q. 11: Find the smallest whole number by which 1008 should be multiplied so as to get a perfect square number. Also, find the square root of the square number so obtained.

Q. 12: Find the smallest whole number by which 2800 should be divided so as to get a perfect square.

Q. 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.

Q.14: Find the smallest square number that is divisible by each of the numbers 8, 15 and 20.

Q.15: Find the square root of 7921 using long division method.

Q. 16: Find the square root of 42.25 using long division method.

Q. 17: Find the least number which must be added to 1750 so as to get a perfect square. Also, find the square root of the obtained number

Extra Questions

1. In a right triangle ABC, ∠B = 90°. a. If AB = 6 cm, BC = 8 cm, find AC b. If AC = 13 cm, BC = 5 cm, find AB.
2. Find the length of the side of a square whose area is 441 m2.
3. There are 500 children in a school. For a P.T. drill, they have to stand in such a manner that the number of rows is equal to the number of columns. How many children would be left out in this arrangement?
4. A gardener has 1000 plants. He wants to plant these in such a way that the number of rows and the number of columns remain the same. Find the minimum number of plants he needs more for this.
5. Express 49 as the sum of 7 odd numbers.
6. Find the square roots of the following decimal numbers  
   (i) 1056.25  
   (ii) 10020.01
7. Mention the smallest number, which when multiplied by 5408 gives a perfect square.

8.   There are 500 children in a school. For a P.T. drill they have to stand in such a manner that the number of rows is equal to number of columns. How many children would be left out in this arrangement?

9.   A school collected Rs 2304 as fees from its students. If each student paid as many paise as there were students in the school, how many students were there in the school?

10.   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.

11.   10404 students are sitting in a lecture room in such a manner that there are as many students in a row as there are rows in a lecture room. How many students are there in each row of a lecture room?