

# SQUARES AND SQUARE ROOT WORKSHEET FOR CLASS 8



## SOLVE THE QUESTIONS:

- Find the perfect square numbers between 60 and 70.
- Write down the following as sum of odd numbers.
  - $5^2$
  - $8^2$
- Find the product of the following
  - $11 \times 13$
  - $25 \times 27$
- Find the value of each of the following without calculating squares.
  - $34^2 - 33^2$
  - $89^2 - 88^2$
- Which of the following  $9^2$ ,  $33^2$ ,  $141^2$ ,  $21^2$  or  $67^2$  end with digit 1?
- Express the following as the sum of two consecutive integers.
  - $13^2$
  - $17^2$
- Find the squares of:
  - $\frac{-2}{9}$
  - $\frac{-5}{7}$
- Check whether (4, 6, 8) is a Pythagorean triplet.
- Using property, find the value of the following:
  - $14^2 - 13^2$
  - $29^2 - 28^2$
- Write each of the following numbers as difference of the square of two consecutive natural numbers.
  - 36
  - 81
  - 120
- Find the smallest number by which 192 must be multiplied to make the product perfect square?



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## SOLVE THE QUESTIONS:

- Using the prime factorisation method, find which of the following numbers are not perfect squares.  
(i) 225  
(ii) 992
- Which of the following triplets are Pythagorean?  
(i) (14, 48, 50)  
(ii) (22, 43, 57)
- Find the square root of the following using successive subtraction of odd numbers starting from 1.  
(i) 121  
(ii) 36  
(iii) 196
- Find the least square number which is divisible by each of the number 2, 4 and 8.
- Find the square roots of the following decimal numbers  
(i) 1036.84  
(ii) 10080.16
- Simplify:  $\sqrt{400} + \sqrt{0.04} + \sqrt{0.000004}$
- Find the square root of the following using prime factorisation  
(i) 196  
(ii) 1024  
(iii) 2916  
(iv) 3721
- What is the least number that must be subtracted from 4229 so as to get a perfect square? Also, find the square root of the number so obtained.
- Find the squares of all natural numbers between 70 and 80 ?
- Find the square root of the following decimal numbers ?  
a) 82.81   b) 68.89   c) 7.84   d) 0.25



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## SOLVE THE QUESTIONS:

1. A school collected Rs.1225 as fees from its students. If each student pays as much money as the number of students in the school, how many students were there in the school?
2. Which of the following numbers are perfect squares? 100,10000, 230330, 21543200000
3. 3844 students are sitting in an auditorium in such a manner that there are as many students in a row as there are rows in the auditorium. How many rows are there in the auditorium?
4. Which of the following triplets are Pythagorean?  
(i) (2, 3, 4) (ii) (5, 4, 7) (iii) (3, 4, 5)
5. Find the smallest number by which 9408 must be divided so that it becomes a perfect square. Also, find the square root of the perfect square so obtained.
6. If  $\frac{4a}{\sqrt{4}} = 4\sqrt{4}$ , find a.
7. Find the length of a diagonal of a rectangle with 15m, 20 m
8. Find the square root of the perfect squares 44,100 by factorising method
9. If  $\sqrt{n} = 15$ , find  $3n + 5$
10. Find the square root of the following rational number  $\frac{576}{3025}$
11. The value of  $7^2 - 1$  is equal to:
12. A number added to its square gives 56. Find the number :
13. Using a suitable identity evaluate  $(102)^2$

