

1. Find the value of $\left(\frac{25}{9} \times \frac{27}{5}\right)^2$.
2. Find the value of 'x' if $5^2 + x^2 + 30^2 = 31^2$.
3. How many natural numbers are there between the squares of 63 and 64?
4. Express 64 as a sum of nine odd natural numbers.
5. Find the Pythagorean triplet whose one member is 12.
6. Express the square of 23 as a sum of two consecutive natural numbers.
7. Case study:
A general arranges his soldiers in rows to form a perfect square. If the total numbers of soldiers be 8341.
 - (i) How many men will not be a part of this perfect square?
a. 11 b. 12 c. 10 d. 9
 - (ii) Find the number of men in the front row.
a. 254 b. 253 c. 250 d. 25
8. Evaluate: $295 - (\sqrt{49} + \sqrt{567})$.
9. Find the square root of 15625 using long division method.
10. Solve: $\sqrt{49} + \sqrt{0.49} + \sqrt{0.0049}$.
11. Tanuj was flying a kite which was at a height of 40m from the ground. The string was 50m long. How far away from the tree was the boy flying the kite?
12. Find the least number which must be added to the following numbers so as to obtain a perfect square:
a. 8748 b. 18207
13. Find the smallest number by which the following numbers should be multiplied so as to get a perfect square. Also find the square root of the numbers so obtained:
a. 18265 b. 2361
14. If $\sqrt{\left(1 + \frac{27}{225}\right)} = \frac{x}{15}$, then find the value of x^2 .
15. Find the area of the square plot whose perimeter is 6400 metre.
16. Find the length of the side of a square which has its area equal to the area of a rectangle with adjacent sides as 56m and 350m.

17. Find the number of people who contributed for the earthquake relief fund if ₹ 324900 was collected. If each person contributed as many rupees as the number of people.
18. What is the number whose one-fourth multiplied by its one-third is equal to 162.
19. What is the difference between the greatest four digit perfect square and the smallest three digit perfect square?

20. Simplify: $\frac{\sqrt{2304} + \sqrt{1764}}{\sqrt{2304} - \sqrt{1764}}$

21. Find the square root of 5 correct to three decimal places.
22. The product of two numbers is 10,000. If one of the numbers is 16 times another, find the numbers.
23. What is the decimal number which when multiplied by itself gives 176.252176.