

Work sheet (SQUARE and CUBE)

1. 196 is Square of which number?
2. A number ending in 9 will have the unit place of its square as ?
3. How many natural number between 5^2 and 6^2 ?
4. Which of the following ~~can~~ can not be a perfect square?
a) 841 b) 529 c) 198 d) None
5. The one's digit of the cube of 23 is ?
6. A square board has an area of 144 sq. unit. How long is each side of the board?
7. Find $1+3+5+7+9+11+13+15 = ?$
8. Which among $43^2, 67^2, 52^2, 59^2$ would end with digit 1?
9. $\sqrt[3]{1000} = ?$
10. The value of $\sqrt{248 + \sqrt{52 + \sqrt{144}}} = ?$

11. Given $\sqrt{4096} = 64$ then find
 $\sqrt{4096} + \sqrt{40.96} = ?$

12. Show that 500 is not a perfect square.

13. Express 81 as sum of ^{first} nine consecutive odd number

14. By prime factorisation method find
 $\sqrt{729}$ and $\sqrt[3]{1331}$.

15. By using identities find
 $(101)^2$ and $(95)^2$.

16. Write Pythagorean triplet whose one number is 4.

17. By what smallest number should 216 be divided so that the quotient is a perfect square. Also find square root of the quotient.

18. By what smallest number should 3600 be multiplied so that the quotient is a perfect cube. Also find cube root of the quotient.

19. Find square root by long division method
(i) 27.04 (ii) 1.44

20. What least number should be added to 6200 to make it a perfect square?

21. Find least square number which is exactly divisible by $3, 4, 5, 6, 8$.

22. Find length of the side of a square if length of its diagonal is 10 cm .

23. If one side of a cube is 15 cm in length find its volume.

24. The dimension of a rectangular field are 80 m and 18 m . Find the length of diagonal.

25. A general wishes to draw up his 7500 soldiers in the ~~row~~ form of a square. After arranging he found that some of them are left out. How many left out?

26. Three numbers are in ratio 2:3:5. The sum of their squares is 608. Find the numbers.

27. Find $\sqrt[3]{27} + \sqrt[3]{0.008} + \sqrt[3]{0.064}$

28. Ananya was working on her math homework, focusing on cube numbers. As she calculated the cubes of different whole numbers, she started noticing something interesting - the unit digit of each cube seemed to follow a pattern based on the unit digit of the original number. Her curiosity led her to make a list of several numbers and their cubes to explore this further.

Based on above observation answer following

(i) What is unit digit of 7^3 ?

(ii) Which of the following number ends with digit 2?

a) 12^3 b) 24^3 c) 36^3 d) 28^3

(iii) Which of the following number cube ending in 7? a) 13 b) 37 c) 25 d) 19

(iv) Which number can not be the unit digit of a perfect cube?

a) 3 b) 7 c) 2 d) None