Sharya Academy

Maths Worksheet Class VIII

Square-Square Root and Cubes - Cube Roots

A. Choose the correct answer:

1. 196 is the square of

(a) 11 (b) 12 (c) 14 (d) 16

2. Which of the following is a square of an even number?

(a) 144 (b) 169 (c) 441 (d) 625

3. A number ending in 9 will have the units place of its square as

(a) 3 (b) 9 (c) 1 (d) 6

4. Which of the following will have 4 at the units place?

(a) 14^2 (b) 62^2 (c) 27^2 (d) 35^2

5. How many natural numbers lie between 5^2 and 6^2?

(a) 9 (b) 10 (c) 11 (d) 12

6. Which of the following cannot be a perfect square?

(a) 841 (b) 529 (c) 198

(d) All of the above

7. The one's digit of the cube of 23 is

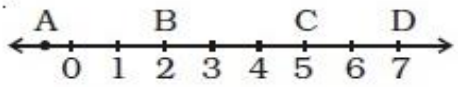
(a) 6 (b) 7 (c) 3 (d) 9

8. A square board has an area of 144 square units. How long is each side of the board?

(a) 11 units (b) 12 units (c) 13 units (d) 14 units

9. Which letter best represents the location of $\sqrt{25}$ on a number line?

(a) A (b) B (c) C (d) D



10. If one member of a pythagorean triplet is 2m, then the other two members are

(a) m, m^2+1

(b) m^2+1, m^2-1

(c) m^2, m^2-1

(d) m^2, $m+1$

11. The sum of successive odd numbers 1, 3, 5, 7, 9, 11, 13 and 15 is

(a) 81 (b) 64 (c) 49 (d) 36

12. The sum of first n odd natural numbers is

(a) $2n+1$ (b) n^2 (c) n^2-1 (d) n^2+1

13. Which of the following numbers is a perfect cube?

(a) 243 (b) 216 (c) 392 (d) 8640

14. The hypotenuse of a right triangle with its legs of lengths $3x \times 4x$ is

(a) $5x$ (b) $7x$ (c) $16x$ (d) $25x$

15. The next two numbers in the number pattern 1, 4, 9, 16, 25 ... are

(a)35, 48 (b) 36, 49 (c) 36, 48 (d) 35,49

16. Which among 43^2, 67^2, 52^2, 59^2 would end with digit 1?

(a) 43^2 (b) 67^2 (c) 52^2 (d) 59^2

17. A perfect square can never have the following digit in its ones place.

(a) 1 (b) 8 (c) 0 (d) 6

18. Which of the following numbers is not a perfect cube?

(a) 216 (b) 567 (c) 125 (d) 343

19. $\sqrt[3]{1000}$ is equal to

(a) 10 (b) 100 (c) 1

(d) None of these

20. If m is the square of a natural number n, then n is

(a) the square of m

(b) greater than m

(c) equal to m

(d) $\sqrt{m}$

21. A perfect square number having n digits where n is even will have square root with

(a) $n+1$ digit (b) $\frac{n}{2}$ digit (c) $\frac{n}{3}$ digit (d) $\frac{n+1}{2}$ digit

22. If m is the cube root of n, then n is

(a) m^3 (b) $\sqrt{m}$ (c) $\frac{m}{3}$ (d) $\sqrt[3]{m}$

23. The value of $\sqrt{248+\sqrt{52+\sqrt{144}}}$ is

(a) 14 (b) 12 (c) 16 (d) 13

24. Given that $\sqrt{4096} = 64$, the value of $\sqrt{4096}+\sqrt{40.96}$ is

(a) 74 (b) 60.4 (c) 64.4 (d) 70.4

B. Fill in the blanks:

25. There are _____ perfect squares between 1 and 100.

26. There are _____ perfect cubes between 1 and 1000.

27. The units digit in the square of 1294 is .

28. The square of 500 will have _____ zeroes.

29. There are _____ natural numbers between n^2 and $(n + 1)^2$

30. The square root of 24025 will have _____ digits.

31. The square of 5.5 is _____.

32. The square root of 5.3×5.3 is _____.

33. The cube of 100 will have _____ zeroes.

34. $1m^2$ = _____ cm^2.

35. $1m^3$ = _____ cm^3.

36. Ones digit in the cube of 38 is _____.

37. The square of 0.7 is _____.

38. The sum of first six odd natural numbers is _____.

39. The digit at the ones place of 57^2 is _____.

40. The sides of a right triangle whose hypotenuse is 17cm are _____ and _____.

41. $\sqrt{1.96}$ = _____.

42. $(1.2)^3$ = _____.

43. The cube of an odd number is always an _____ number.

44. The cube root of a number x is denoted by _____.

45. The least number by which 125 be multiplied to make it a perfect square is _____.

46. The least number by which 72 be multiplied to make it a perfect cube is _____.

47. The least number by which 72 be divided to make it a perfect cube is _____.

48. Cube of a number ending in 7 will end in the digit _____.