

CHAPTER-1 | A Square and A Cube

QUIZ PART-14

1. What is the main pattern shown with cubes?

- A. Cubes and even numbers
- B. Cubes and consecutive odd numbers
- C. Squares and decimals
- D. Fractions and roots (B)

Explanation: The chapter shows that perfect cubes can be written as sums of consecutive odd numbers.

2. What is 3^3 written as a sum of odd numbers?

- A. $3 + 5$
- B. $7 + 9 + 11$
- C. $13 + 15 + 17$
- D. $21 + 23 + 25$ (B)

Explanation: $7 + 9 + 11 = 27 = 3^3$.

3. What is 5^3 written as a sum of odd numbers?

- A. $13 + 15 + 17 + 19$
- B. $21 + 23 + 25 + 27 + 29$
- C. $31 + 33 + 35 + 37 + 39$
- D. $1 + 3 + 5 + 7 + 9$ (B)

Explanation: $21 + 23 + 25 + 27 + 29 = 125 = 5^3$.

4. What is the sum $91 + 93 + 95 + 97 + 99 + 101 + 103 + 105 + 107 + 109$?

- A. 100
- B. 1000
- C. 10000
- D. 1100 (B)

Explanation: These are 10 consecutive odd numbers, so the sum is $10^3 = 1000$.

5. What is the cube root of 8?

- A. 2
- B. 3
- C. 4
- D. 8 (A)

Explanation: $2^3 = 8$, so the cube root of 8 is 2.

6. What is $\sqrt[3]{27}$?

- A. 2
- B. 3
- C. 9
- D. 7 (B)

Explanation: $3^3 = 27$, so $\sqrt[3]{27} = 3$.

7. What is $\sqrt[3]{1000}$?

- A. 5
- B. 10
- C. 100
- D. 1000 (B)

Explanation: $10^3 = 1000$, so $\sqrt[3]{1000} = 10$.

8. If $y = x^3$, then what is x?

- A. Square of y
- B. Cube of y
- C. Cube root of y
- D. Square root of y (C)

Explanation: If $y = x^3$, then x is the cube root of y.

9. What is the general rule for $\sqrt[3]{n^3}$?

- A. n^2
- B. n
- C. $3n$
- D. n^3 (B)

Explanation: The cube root of n^3 is n.

10. Which topic is introduced after cubic numbers in the overview?

- A. Cube roots
- B. Square root
- C. Perfect squares
- D. Odd numbers (A)

Explanation: The overview highlights Cube roots after Cubic numbers.