

CHAPTER-1 | A Square and A Cube

QUIZ
PART-16

1. What is the topic of successive differences?

- A. Patterns
- B. Fractions
- C. Decimals
- D. Angles (A)

Explanation : Successive differences show patterns in squares and cubes.

2. What are the first differences of perfect squares 1, 4, 9, 16?

- A. 3, 5, 7
- B. 2, 4, 6
- C. 1, 3, 5
- D. 4, 6, 8 (A)

Explanation: $4 - 1 = 3$, $9 - 4 = 5$, and $16 - 9 = 7$.

3. What are the first differences of perfect cubes 1, 8, 27, 64?

- A. 7, 19, 37
- B. 3, 5, 7
- C. 6, 12, 18
- D. 1, 8, 27 (A)

Explanation: $8 - 1 = 7$, $27 - 8 = 19$, and $64 - 27 = 37$.

4. At which difference level do perfect cubes become constant?

- A. First
- B. Second
- C. Third
- D. Fourth (C)

Explanation: For cubes, the third differences become constant.

5. What is the constant third difference for perfect cubes shown?

- A. 3
- B. 6
- C. 9
- D. 12 (B)

Explanation : The third differences of cubes are 6, 6, 6.

6. Who used clay tablets for squares and cubes?

- A. Babylonians
- B. Greeks
- C. Romans
- D. Egyptians (A)

Explanation : The chapter mentions Babylonians around 1700 BCE.

7. What does "Varga" mean?

- A. Square
- B. Cube
- C. Root
- D. Difference (A)

Explanation : Varga means a square figure, its area, or square of a number.

8. What does "Ghana" mean?

- A. Square
- B. Cube
- C. Root
- D. Number (B)

Explanation : Ghana means a solid cube or cube of a number.

9. What was square root called in Sanskrit?

- A. Varga-mula
- B. Ghana-mula
- C. Jidhr
- D. Radix (A)

Explanation : Varga-mula was used for square root.

10. What was cube root called in Sanskrit?

- A. Varga-mula
- B. Ghana-mula
- C. Radix
- D. Pada (B)

Explanation : Ghana-mula was used for cube root.