

Number series questions with answers

15 exam-shaped questions with full worked solutions.
For IBPS · SBI · RRB · SSC reasoning.

Free, share it forward. Every question in this set was generated and verified by the Deduce engine — the same one behind the free daily puzzle round at deducepuzzles.com.

The questions

Work them on paper first. Full solutions start after question 15 — the numbering matches.

QUESTION 1

What number replaces the question mark?

3, 6, ?, 24, 48

- A. 11
 - B. 12
 - C. 14
 - D. 10
 - E. 13
-

QUESTION 2

What number replaces the question mark?

6, 18, 54, 162, 486, ?

- A. 1456
 - B. 1460
 - C. 1459
 - D. 1457
 - E. 1458
-

QUESTION 3

What number replaces the question mark?

1, ?, 16, 36, 76

- A. 4
 - B. 6
 - C. 5
 - D. 8
 - E. 7
-

QUESTION 4

What number replaces the question mark?

7, 12, 19, ?, 39, 52, 67

- A. 29
 - B. 26
 - C. 30
 - D. 27
 - E. 28
-

QUESTION 5

What number replaces the question mark?

16, 25, ?, 49, 64, 81

- A. 38
 - B. 36
 - C. 34
 - D. 37
 - E. 35
-

QUESTION 6

What number replaces the question mark?

2, 3, 5, 8, 13, 21, ?

- A. 36
 - B. 33
 - C. 35
 - D. 34
 - E. 32
-

QUESTION 7

What number replaces the question mark?

9, 16, 25, ?, 49

- A. 38
 - B. 34
 - C. 35
 - D. 37
 - E. 36
-

QUESTION 8

What number replaces the question mark?

12, 14, ?, 18, 20

- A. 18
 - B. 16
 - C. 17
 - D. 14
 - E. 15
-

QUESTION 9

What number replaces the question mark?

9, 12, ?, 21, 27, 34

- A. 17
 - B. 14
 - C. 16
 - D. 18
 - E. 15
-

QUESTION 10

What number replaces the question mark?

3, 13, 43, 133, 403, 1213, ?

- A. 3644
 - B. 3641
 - C. 3642
 - D. 3643
 - E. 3645
-

QUESTION 11

What number replaces the question mark?

10, 14, 19, 25, 32, 40, ?

- A. 49
 - B. 48
 - C. 51
 - D. 50
 - E. 47
-

QUESTION 12

What number replaces the question mark?

5, 9, 14, ?, 37, 60

- A. 21
 - B. 22
 - C. 23
 - D. 25
 - E. 24
-

QUESTION 13

What number replaces the question mark?

12, 14, 16, 18, ?

- A. 22
 - B. 21
 - C. 18
 - D. 19
 - E. 20
-

QUESTION 14

What number replaces the question mark?

25, 36, 49, ?, 81

- A. 64
 - B. 65
 - C. 66
 - D. 62
 - E. 63
-

QUESTION 15

What number replaces the question mark?

25, 36, 49, 64, 81, 100, ?

- A. 123
 - B. 121
 - C. 120
 - D. 122
 - E. 119
-

Answers and worked solutions

Each walkthrough is the engine's own elimination order, step for step — not a reconstruction written after the fact.

SOLUTION 1

Answer: **12**

1. The rule is: geometric (constant ratio).
 2. Consecutive ratios are constant: $6/3=2$, $12/6=2$, $24/12=2$, $48/24=2$.
 3. Applying the rule, the value at the "?" is 12.
-

SOLUTION 2

Answer: **1458**

1. The rule is: geometric (constant ratio).
 2. Consecutive ratios are constant: $18/6=3$, $54/18=3$, $162/54=3$, $486/162=3$, $1458/486=3$.
 3. Applying the rule, the value at the "?" is 1458.
-

SOLUTION 3

Answer: **6**

1. The rule is: $\times k$ then $+c$ (multiply then add).
 2. Each term comes from the previous term by the same multiply-then-add operation.
 3. Applying the rule, the value at the "?" is 6.
-

SOLUTION 4

Answer: **28**

1. The rule is: increasing differences (differences in arithmetic progression).
 2. Consecutive differences are 5, 7, 9, 11, 13, 15; those differences themselves follow an arithmetic pattern.
 3. Applying the rule, the value at the "?" is 28.
-

SOLUTION 5

Answer: **36**

1. The rule is: perfect squares (with constant offset).
 2. Compare the terms with consecutive perfect squares; the same constant offset is applied throughout.
 3. Applying the rule, the value at the "?" is 36.
-

SOLUTION 6

Answer: **34**

1. The rule is: Fibonacci-like (each term is the sum of the previous two).
 2. From the third term onward, each term equals the sum of the previous two terms.
 3. Applying the rule, the value at the "?" is 34.
-

SOLUTION 7

Answer: **36**

1. The rule is: consecutive perfect squares.
 2. The terms are consecutive perfect squares.
 3. Applying the rule, the value at the "?" is 36.
-

SOLUTION 8

Answer: **16**

1. The rule is: arithmetic (constant difference).
 2. Consecutive differences are constant: 2, 2, 2, 2.
 3. Applying the rule, the value at the "?" is 16.
-

SOLUTION 9

Answer: **16**

1. The rule is: increasing differences (differences in arithmetic progression).
 2. Consecutive differences are 3, 4, 5, 6, 7; those differences themselves follow an arithmetic pattern.
 3. Applying the rule, the value at the "?" is 16.
-

SOLUTION 10

Answer: **3643**

1. The rule is: $\times k$ then $+c$ (multiply then add).
 2. Each term comes from the previous term by the same multiply-then-add operation.
 3. Applying the rule, the value at the "?" is 3643.
-

SOLUTION 11

Answer: **49**

1. The rule is: increasing differences (differences in arithmetic progression).
 2. Consecutive differences are 4, 5, 6, 7, 8, 9; those differences themselves follow an arithmetic pattern.
 3. Applying the rule, the value at the "?" is 49.
-

SOLUTION 12

Answer: **23**

1. The rule is: Fibonacci-like (each term is the sum of the previous two).
 2. From the third term onward, each term equals the sum of the previous two terms.
 3. Applying the rule, the value at the "?" is 23.
-

SOLUTION 13

Answer: **20**

1. The rule is: arithmetic (constant difference).
 2. Consecutive differences are constant: 2, 2, 2, 2.
 3. Applying the rule, the value at the "?" is 20.
-

SOLUTION 14

Answer: **64**

1. The rule is: consecutive perfect squares.
 2. The terms are consecutive perfect squares.
 3. Applying the rule, the value at the "?" is 64.
-

SOLUTION 15

Answer: **121**

1. The rule is: perfect squares (with constant offset).
2. Compare the terms with consecutive perfect squares; the same constant offset is applied throughout.
3. Applying the rule, the value at the "?" is 121.

One round a day beats one set a month.

A worked set teaches the shape; a clock teaches the speed. Deduce serves a free timed round every day, with a streak, a leaderboard and the full walkthrough after every round.

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