

SAMPLE QUESTIONS – ILHAM HOTS QUIZ 2024

Answers and explanation for each question are given in the last page.

1. Look at this series: 7, 10, 8, 11, 9, 12, ... What number should come next?

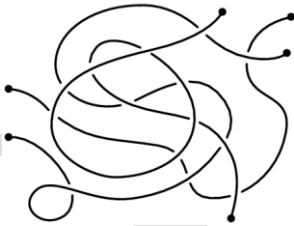
- A. 7
- B. 10
- C. 12
- D. 13

2. Look carefully for the pattern, and then choose which pair of numbers comes next.

8 12 9 13 10 14 11

- A. 14 11
- B. 15 12
- C. 8 15
- D. 15 19

3. How many ropes are there in the picture?



- A. 3
- B. 4
- C. 5
- D. 6

4. Masha has 2 brothers and 2 sisters in her family. How many children are there in this family?
- A. 3
 - B. 2
 - C. 7
 - D. 5
5. Counting the train cars from the locomotive to the last car, Sara realizes she has a reserved seat in the 21st car. Counting the train cars from the last car to the locomotive, she realizes she has the same reserved seat in the 7th car. How many cars does the train have?
- A. 25
 - B. 26
 - C. 27
 - D. 28
6. How many natural numbers between 1 and 99 can be written using only one digit 3?
- A. 15
 - B. 16
 - C. 17
 - D. 18
7. Mr. and Mrs. Jones have many children. Their daughter Lila said: "I have three sisters and four brothers". What could her brother Joe say?
- A. I have 4 sisters and 3 brothers
 - B. I have 2 sisters and 2 brothers
 - C. I have 3 sisters and 3 brothers
 - D. I have 2 sisters and 4 brothers

8. How many times is more one hour than 20 minutes?
- A. 3
 - B. 4
 - C. 5
 - D. 6
9. One clock is 25 minutes behind and shows 7 h 40 min. What does another clock show if it is 15 minutes ahead?
- A. 8 h 20 min
 - B. **7 h 10 min**
 - C. **9 h 20 min**
 - D. **5 h 20 min**
10. In a box there are five boxes, each one for which contains five boxes. How many boxes are there?
- A. 30
 - B. 31
 - C. 32
 - D. 33

ANSWER

Question 1

Answer: B

This is a simple alternating addition and subtraction series. In the first pattern, 3 is added; in the second, 2 is subtracted.

Question 2

Answer: B

This is an alternating addition and subtraction series, in which the addition of 4 is alternated with the subtraction of 3.

Question 3

Answer: A- 3 ropes

There are 3 ropes.

Question 4

Answer: D- 5 children

Masha + 2 brothers + 2 sisters = 5 children.

Question 5

Answer: C-27 cars



We can see that there are 27 cars altogether.

Question 6

Answer: D- 18 numbers

The natural numbers that we can write are: 3, 13, 23, 30, 31, 32, 34, 35, 36, 37, 38, 39, 43, 53, 63, 73, 83, 93.

Question 7

Answer: A-I have 4 sisters and 3 brothers

Lila said I have three sisters and four brothers. Joe will say four sisters including Lila and three brothers excluding him.

Question 8

Answer: A- 3 times

1 hour is equal to 60 minutes. So, there are $60 \text{ minutes} \div 20 \text{ minutes} = 3$ times more one hour than 20 minutes.

Question 9

Answer: A- 8 h 20 min

The exact time is $7 \text{ h } 40 \text{ min} + 25 \text{ min} = 8 \text{ h } 5 \text{ min}$. So, another clock which is 15 minutes ahead is

$8 \text{ h } 5 \text{ min} + 15 \text{ min} = 8 \text{ h } 20 \text{ min}$.

Question 10

Answer: B- 31 boxes

There are 1 largest box with 5 smaller boxes and 25 smallest boxes in it. So, the total is $1 + 5 + 25 = 31$ boxes altogether.

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