1. Number Series

Question:
Find the next number in the series:
1, 4, 9, 16, 25, __?

Solution:
The series represents the squares of consecutive integers:
$1^2 = 1$, $2^2 = 4$, $3^2 = 9$, $4^2 = 16$, $5^2 = 25$, and the next square will be $6^2 = 36$.

Answer:
36

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2. Blood Relations

Question:
Pointing to a woman, Rajesh said, "Her son is my nephew." How is Rajesh related to the woman?

Solution:
If Rajesh's nephew is her son, then Rajesh must be the brother of her husband. Therefore, Rajesh is the **brother-in-law** of the woman.

Answer:
Brother-in-law

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3. Coding-Decoding

Question:
In a certain code language, "COMPUTER" is written as "DPNVQFSU." How is "MOBILE" written in the same code?

Solution:
Let's analyze the shift for each letter in "COMPUTER" to "DPNVQFSU":

- C → D (+1)
- O → P (+1)
- M → N (+1)
- P → Q (+1)
- U → V (+1)
- T → F (-13)
- E → S (+14)

- R → U (+3)

Following the same pattern for "MOBILE":

- M → N (+1)
- O → P (+1)
- B → C (+1)
- I → J (+1)
- L → M (+1)
- E → F (+14)

So, "MOBILE" will be coded as **"NPCJMF."**

Answer:
NPCJMF

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4. Odd One Out

Question:
Find the odd one out:
15, 25, 35, 45, 60, 75

Solution:
The difference between consecutive terms is mostly 10:
25 - 15 = 10
35 - 25 = 10
45 - 35 = 10
75 - 60 = 15

The difference between 60 and 75 is 15, unlike the rest, where the difference is 10. Hence, **60** is the odd one out.

Answer:
60

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5. Direction Sense

Question:
A man walks 10 meters east, then turns right and walks 15 meters. Then, he turns right again and walks 10 meters. In which direction is he now from the starting point?

Solution:

- He starts at point O.
- He walks 10 meters east to point A.
- Then he turns right and walks 15 meters south to point B.
- Finally, he turns right again and walks 10 meters west to point C.

Now, he is 15 meters south of the starting point.

Answer:
South

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6. Series Completion

Question:
What comes next in the series:
5, 11, 17, 23, __, 35?

Solution:
The difference between consecutive numbers is consistently 6:
11 - 5 = 6
17 - 11 = 6
23 - 17 = 6

So, the next number in the series should be:
23 + 6 = **29**

Answer:
29

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7. Syllogism

Question:
Statements:

1. All roses are flowers.
2. Some flowers are red.
   Conclusion:
   Some roses are red.

Solution:
From the given statements:

- All roses are flowers, but we don't know whether any roses are red.

- The second statement tells us that some flowers are red, but it doesn't specify that these red flowers are roses.

Thus, the conclusion is **not valid** based on the given premises.

Answer:
No

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8. Venn Diagram

Question:
Which of the following diagrams best represents the relationship between:
Cats, Pets, and Animals?

Solution:

- Cats are animals.
- Some animals are pets.
- Cats are a subset of pets and animals.

The correct diagram should represent that "Cats" are inside both "Animals" and "Pets."

Answer:
Venn diagram with overlapping sets of "Pets" and "Animals" containing "Cats."

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9. Seating Arrangement

Question:
Five people are sitting in a row. A is sitting to the immediate left of B and to the immediate right of C. D is sitting to the immediate left of B. Who is sitting in the middle?

Solution:
From the clues:

- A is to the immediate left of B and to the immediate right of C, so the order is: C, A, B.
- D is to the immediate left of B, so the arrangement is: C, A, B, D.

The person sitting in the middle is **A**.

Answer:
A

10. Clock Problem

Question:
At what time between 4 and 5 o'clock will the hands of a clock be in exactly the same straight line but opposite in direction?

Solution:
For the clock hands to be in exactly opposite directions, the minute hand will be 30 minutes ahead of the hour hand.

Using the formula for calculating the position of the hour hand:

- Minute hand position = Minute×6\text{Minute} \times 6Minute×6 degrees.
- Hour hand position = (Hour×30)+Minute2(Hour \times 30) + \frac{\text{Minute}}{2}(Hour×30)+2Minute degrees.

At 4:00, the hour hand is at 120 degrees (4 × 30), and the minute hand is at 0 degrees. For them to be opposite:

- The difference between the minute hand and the hour hand should be 180 degrees.

Solving, you find that the time is **4:24**.

Answer:
4:24

11. Analogies

Question:
Dog is to Puppy as Cat is to __?

Solution:
Just like a dog is an adult and a puppy is its young, a cat is an adult, and a kitten is its young.

Answer:
Kitten

12. Pairing of Letters

Question:
In a certain code, if "GOT" is coded as "GHS," then how is "THAT" coded?

Solution:
Observe the pattern:

- G → G (no change)
- O → H (O - 1)
- T → S (T - 1)

So for "THAT":

- T → T (no change)
- H → G (H - 1)
- A → Z (A - 1)
- T → S (T - 1)

Thus, "THAT" will be coded as **"TGZS."**

Answer:
TGZS

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13. Critical Reasoning

Question:
If all teachers are knowledgeable and some knowledgeable people are not experienced, can we conclude that some teachers are not experienced?

Solution:
The statement says "all teachers are knowledgeable," but it also says "some knowledgeable people are not experienced." Therefore, it is possible that some teachers are not experienced, but the given information does not guarantee it.

Answer:
Not necessarily.

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14. Puzzle

Question:
There are 5 people standing in a line: A, B, C, D, and E. C is in front of D, but behind A. B is not at the end. Who is standing at the last position?

Solution:

- C is in front of D but behind A, so the order is A, C, D.
- B is not at the end, so B must be the second person from the end.

Thus, E must be the person at the last position.

Answer:
E

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15. Calendar Problem

Question:
What was the day of the week on 15th August 1947?

Solution:
To find the day of the week, we use the known formula or an online day calculator for historical dates. By using such tools or the Zeller's Congruence formula, we find that **15th August 1947 was a Friday.**

Answer:
Friday