

8. figure series / pattern completion

Figure Series / Pattern Completion Explanation

In figure series problems, you are given a sequence of figures or shapes that follow a certain logical pattern or rule. Your job is to:

- Identify the pattern or rule governing the series.
- Predict the next figure in the series or choose the figure that completes the pattern.

Patterns can be based on:

- Number of shapes
 - Shape rotation
 - Size changes
 - Shading or coloring
 - Number of lines or dots
 - Movement of elements inside the figure
 - Combination of above
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Example 1: Simple Shape Rotation

Series:

Figure 1: A triangle pointing upwards

Figure 2: A triangle pointing right

Figure 3: A triangle pointing down

Figure 4: ?

Step-by-step reasoning:

- The triangle is rotating 90° clockwise in each step.
- Up → Right → Down → Left

Answer: Triangle pointing left

Example 2: Increasing Number of Shapes

Series:

Figure 1: One circle

Figure 2: Two circles

Figure 3: Three circles

Figure 4: ?

Step-by-step reasoning:

- The number of circles is increasing by one in each step.

Answer: Four circles

Example 3: Changing Shading Pattern

Series:

Figure 1: Square with no shading

Figure 2: Square half-shaded on the right side

Figure 3: Square fully shaded

Figure 4: ?

Step-by-step reasoning:

- The shading is increasing: no shading → half → full → ?
- After fully shaded, the pattern might repeat or reverse.

Assuming the pattern reverses:

Answer: Square half-shaded on the left side (mirror of step 2)

Example 4: Complex Pattern with Movement

Suppose we have a figure of a dot inside a square moving clockwise corner by corner:

- Figure 1: Dot at top-left corner
- Figure 2: Dot at top-right corner
- Figure 3: Dot at bottom-right corner
- Figure 4: ?

Step-by-step reasoning:

- The dot moves clockwise around the square corners.

Answer: Dot at bottom-left corner

Example 5: Pattern with Combined Elements

Suppose a figure series has:

- Figure 1: One triangle
- Figure 2: One triangle + one circle
- Figure 3: Two triangles + one circle
- Figure 4: ?

Step-by-step reasoning:

- Triangle count increases by one every step.
- Circle count stays at one.

Answer: Three triangles + one circle

Tips to Solve Figure Series Questions

1. Look carefully at each figure and note differences.
 2. Check changes in:
 - Number of objects
 - Shape types
 - Size
 - Rotation or direction
 - Shading or color
 - Position or movement
 3. Try to find if changes happen in a cycle (like rotation), increase/decrease, or alternate.
 4. Predict the next step logically.
 5. If multiple rules seem possible, check which fits all given figures best.
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