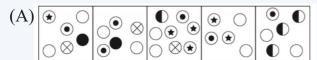
Logical-Reasoning: 2D Logic

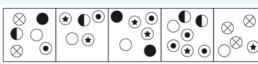
Question: Which set does the Figure belong to? Select from A, B, and C.

Options:





(B)



(C) Neither set A nor set B

Thinking (From Claude-3.7):

I. Interpreting the Visual Problem

This is a pattern classification task with:

Set A (top row): 5 boxes. Set B (middle row): 5 boxes. Figure (bottom): 1 box to classify as Set A, Set B, or neither.

II. Extracting Symbolic Features

Set A Characteristics:

Symbols include: stars (\bigstar) , filled circles (\bullet) , empty circles (\circ) , half-filled circles (1), and X marks (\bigstar) . Notable variation exists in both symbol count and distribution.

■ Set B Characteristics:

Same symbol set appears. Need to identify what differentiates Set B from Set A.

■ Bottom Figure Composition:

2 stars (★) 2 empty circles (○) 1 half-filled circle (●) 0 filled circles (●) 0 X symbols (✗)

III. Comparative Symbol Analysis

Counted symbol distributions per box:

Set A: Set B:

A1: $\bigstar \times 1$, $\bullet \times 2$, $\circ \times 3$, $\textcircled{1} \times 0$, $\bigstar \times 2$ B1: $\bigstar \times 0$, $\bullet \times 1$, $\circ \times 1$, $\textcircled{1} \times 1$, $\bigstar \times 3$

A2: $\bigstar \times 0$, $\bullet \times 2$, $\circ \times 3$, $\textcircled{D} \times 0$, $\bigstar \times 1$ B2: $\bigstar \times 2$, $\bullet \times 0$, $\circ \times 2$, $\textcircled{D} \times 1$, $\bigstar \times 0$

A3: $\bigstar \times 3$, $\bullet \times 1$, $\circ \times 2$, $\textcircled{1} \times 1$, $X \times 1$ B3: $\bigstar \times 2$, $\bullet \times 2$, $\circ \times 1$, $\textcircled{1} \times 0$, $X \times 0$

A4: $\bigstar \times 2$, $\bullet \times 2$, $\circ \times 2$, $\bigcirc \times 0$, $\chi \times 0$ B4: $\bigstar \times 1$, $\bullet \times 3$, $\circ \times 1$, $\bigcirc \times 2$, $\chi \times 0$

A5: $\bigstar \times 0$, $\bullet \times 1$, $\circ \times 3$, $\textcircled{1} \times 2$, $\bigstar \times 0$ B5: $\bigstar \times 1$, $\bullet \times 0$, $\circ \times 1$, $\textcircled{1} \times 0$, $\bigstar \times 3$

The Figure:

 $\bigstar \times 2$, $\bullet \times 0$, $\circ \times 2$, $\textcircled{\bullet} \times 1$, $X \times 0$

Observation: The Figure's symbol composition exactly matches Set B box 2.

IV. Symbol Count Comparison

Set A: 6–8 symbols Set B: 5–7 symbols Figure: 5 symbols \rightarrow fits Set B

V. Conclusion



The Figure's total symbol count and exact match with Set B box 2 confirm its classification.

Correct Answer: A

Response: Looking at this problem, the goal is to determine which set the bottom figure belongs to—Set A, Set B, or neither.

The figure contains: 2 stars (\bigstar) , 2 empty circles (\circ) , 1 half-filled circle $(\textcircled{\bullet})$, No filled circles (\bullet) or X symbols (X)

Set B, box 2, has an identical symbol composition, and its total symbol count (5) also matches that of the figure. In contrast, Set A boxes typically contain more symbols and different combinations.

Given the perfect match in both symbol type and count, the figure clearly **belongs to Set B.**