

Diagrammatic Reasoning Test 1

Solutions Booklet

Instructions

This diagrammatic reasoning test comprises **30 questions**. You will have **25 minutes** in which to correctly answer as many as you can.

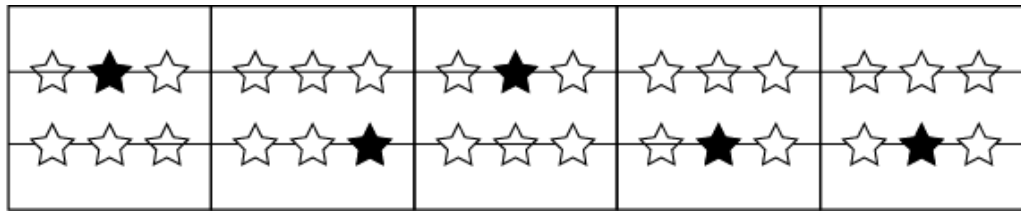
In each question you will be presented with two sets of figures; set A and set B. All the figures in set A have something in common with each other and all the figures in set B have something else in common with each other.

You will have to use your understanding of the rules which apply to each set, and choose whether the question figure belongs to set A, set B, or neither set.

You will have to work quickly and accurately to perform well in this test. If you don't know the answer to a question, leave it and come back to it if you have time. You may click Back and Next during the test to review or skip questions.

Try to find a time and place where you will not be interrupted during the test. **The test will start on the next page.**

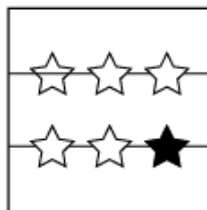
Set A



Set B



Figure



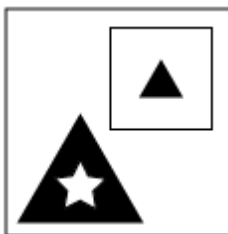
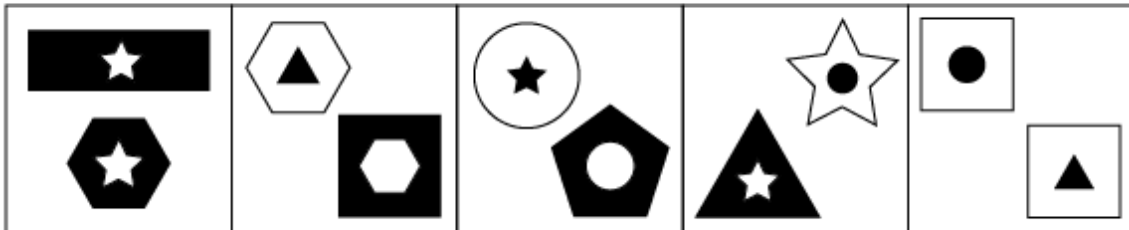
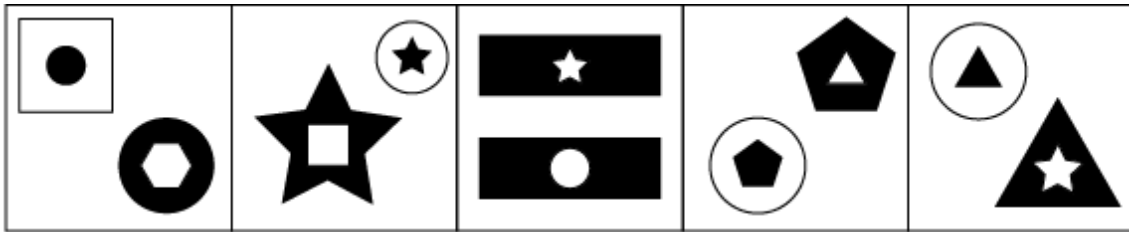
Q1 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each box contains exactly one shaded star and two stars behind the lines.

Set B: Each box contains exactly one shaded star and one star behind the lines.

Figure: The Figure contains one shaded star and one star behind the lines.



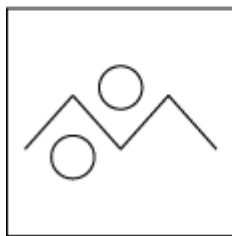
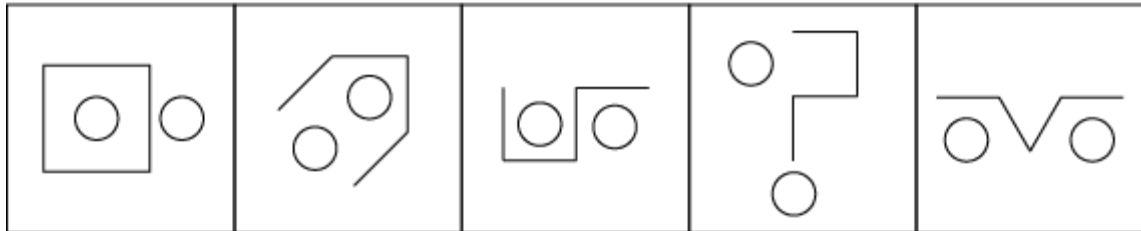
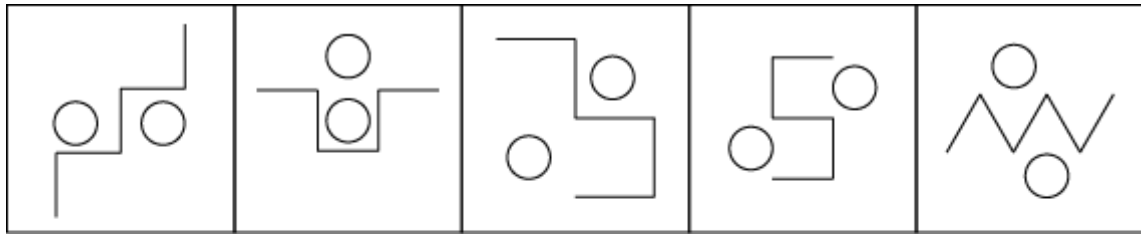
Q2 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each box has exactly one matching pair of shapes. Both of these shapes are shaded.

Set B: Each box has exactly one matching pair of shapes. Both of these shapes are unshaded. The other shapes are shaded.

Figure: The Figure contains one matching pair of shapes: the triangles. Both of these triangles are shaded.



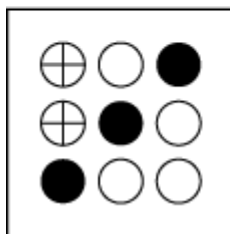
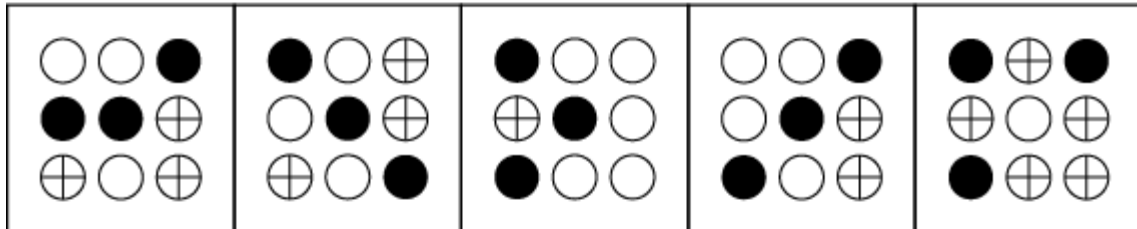
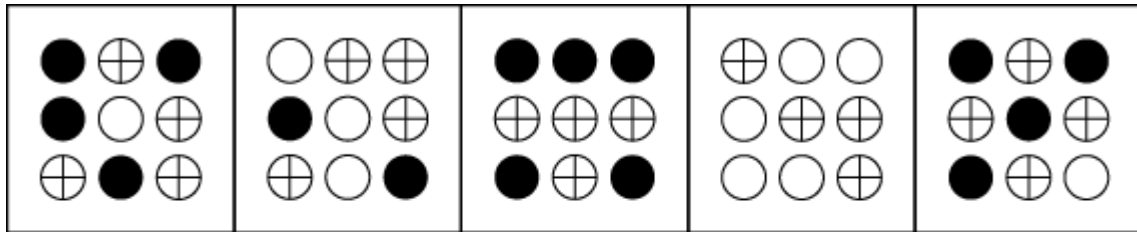
Q3 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each box contains five lines and two circles.

Set B: Each box contains four lines and two circles.

Figure: The Figure contains four lines and two circles.



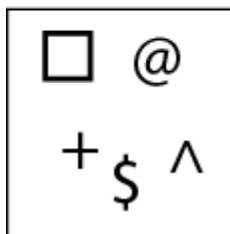
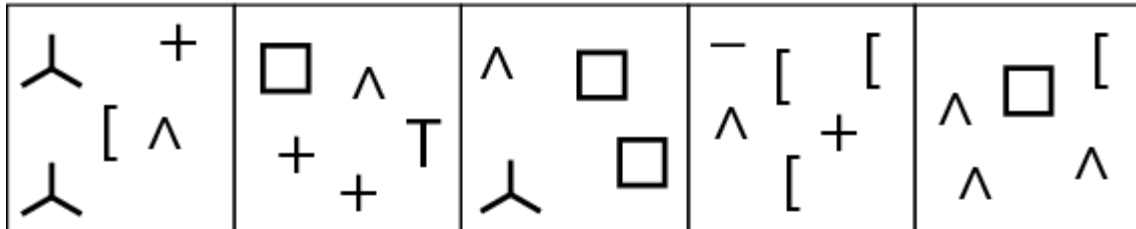
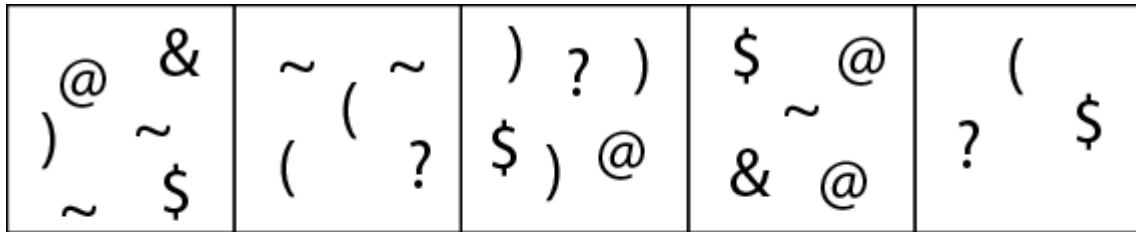
Q4 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each box contains exactly four crossed circles.

Set B: Each box contains exactly three shaded circles.

Figure: The Figure contains three shaded circles.



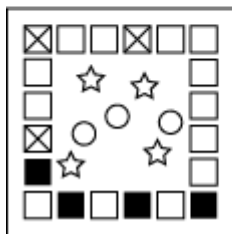
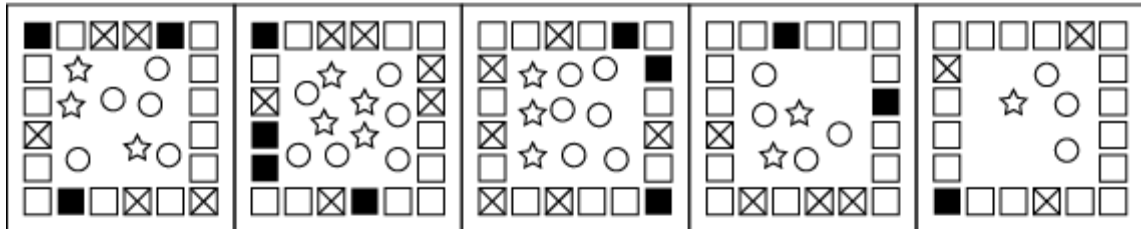
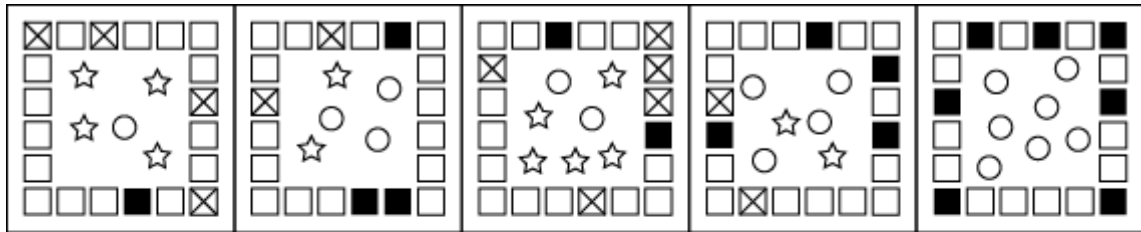
Q5 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: Each box contains symbols with curved edges.

Set B: Each box contains symbols with only straight edges.

Figure: The Figure contains symbols with both curved and straight edges.



Q6 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: The total number of crossed boxes is equal to the total number of stars. The total number of shaded boxes is equal to the total number of circles.

Set B: The total number of crossed boxes is equal to the total number of circles. The total number of shaded boxes is equal to the total number of stars.

Figure: There are four shaded boxes and four stars. There are three crossed boxes and three circles.



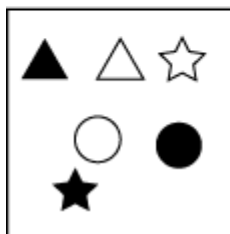
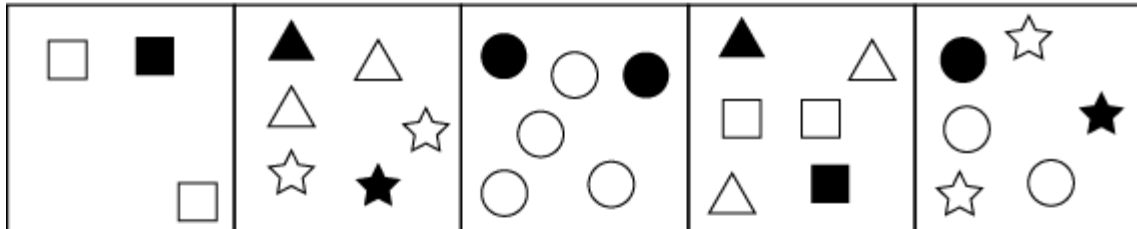
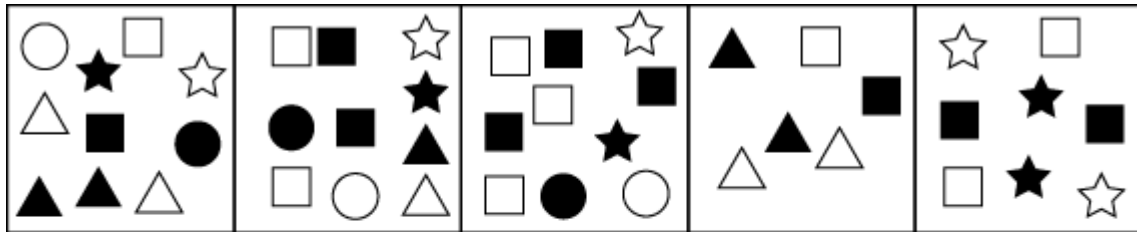
Q7 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each shape is made up of three segments.

Set B: Each shape is made up of four segments.

Figure: The shape in the Figure consists of three segments.



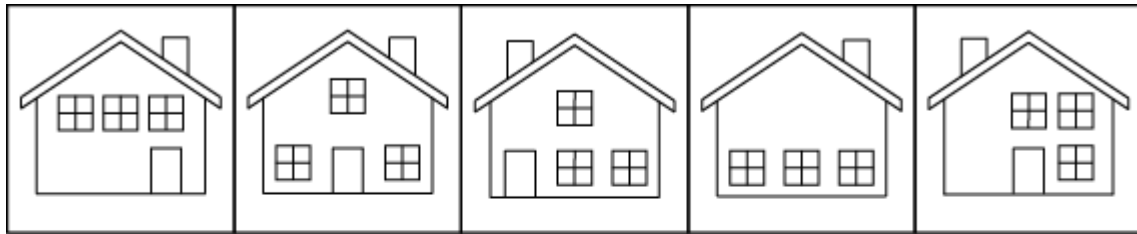
Q8 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: For each unshaded shape, there is an identical, shaded shape.

Set B: For each shaded shape, there are two identical unshaded shapes.

Figure: For each unshaded shapes, there is an identical shaded shape.



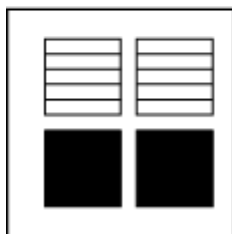
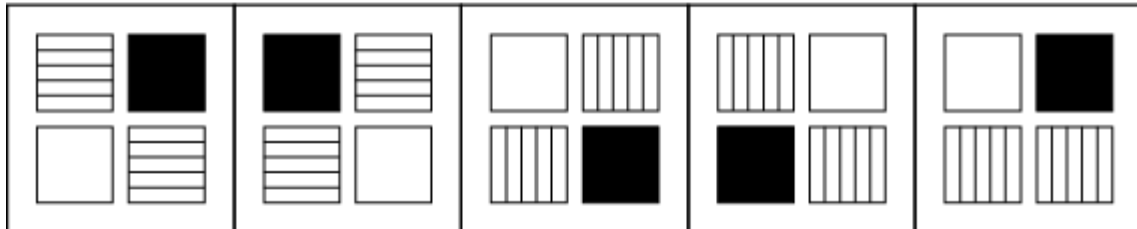
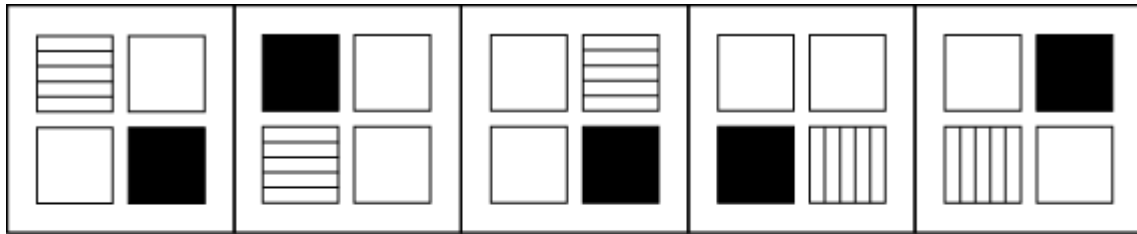
Q9 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each house has exactly three windows.

Set B: Each house has exactly four windows.

Figure: The house in the Figure has four windows.



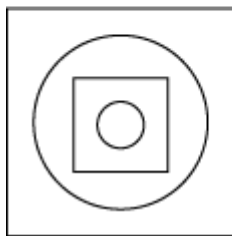
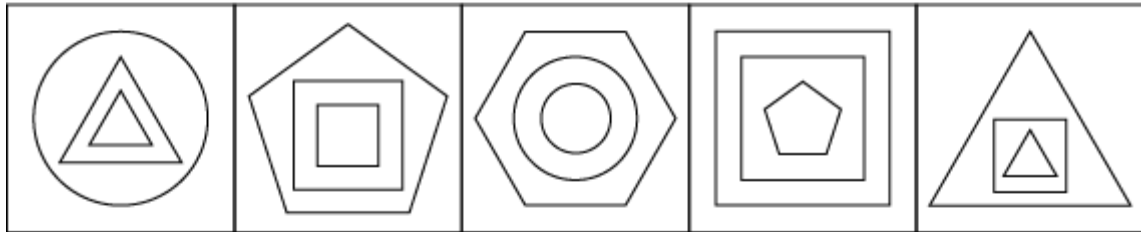
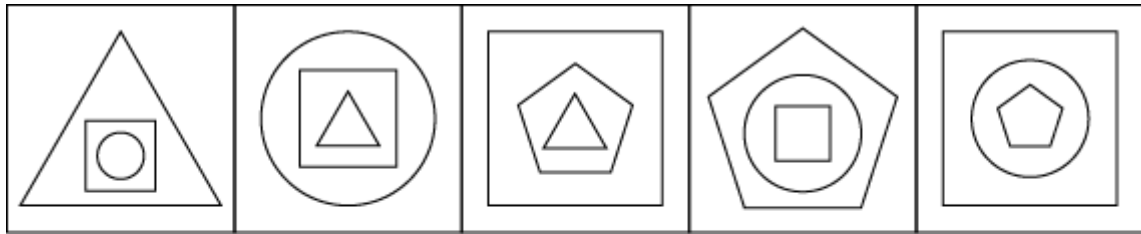
Q10 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: Each box contains one striped square, one shaded square and two unshaded squares.

Set B: Each box contains two striped squares, one shaded square and one unshaded square.

Figure: The Figure contains two shaded squares and two striped squares.



Q11 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each box contains three different shapes.

Set B: Each box contains two different shapes.

Figure: The Figure contains two circles and one square - two different shapes.



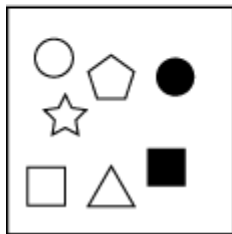
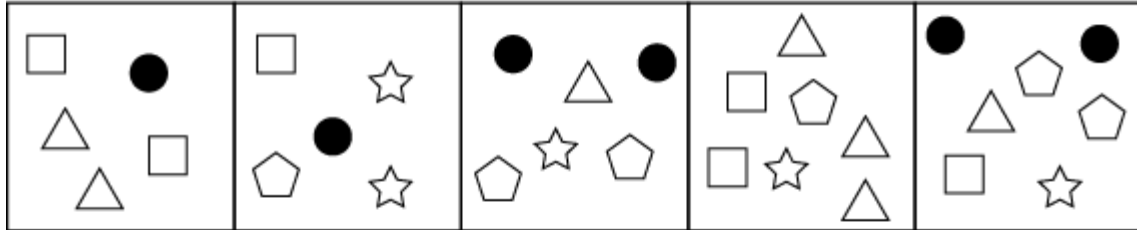
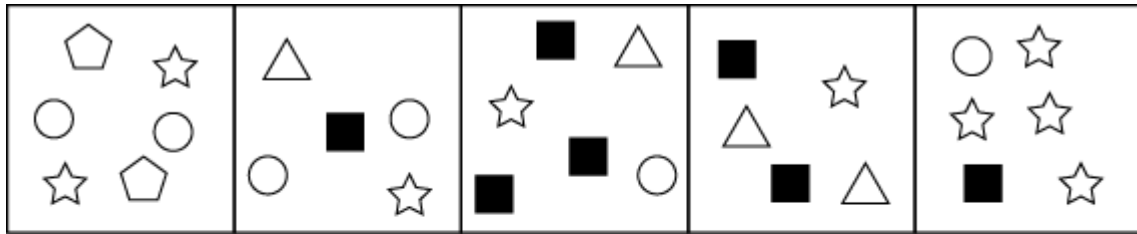
Q12 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each box contains an even number of stars.

Set B: Each box contains an odd number of stars.

Figure: The Figure contains an even number of stars.



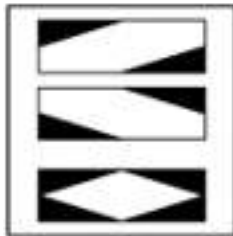
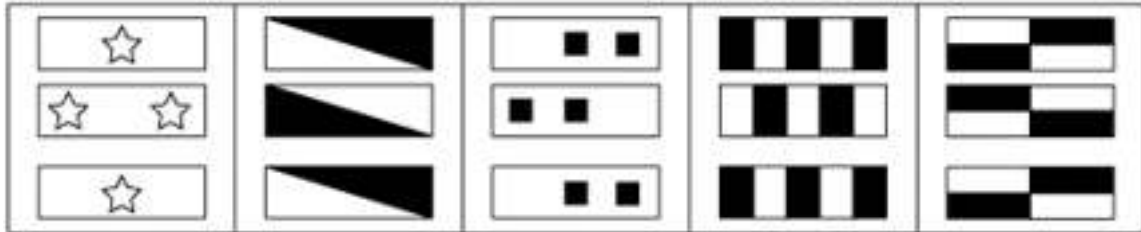
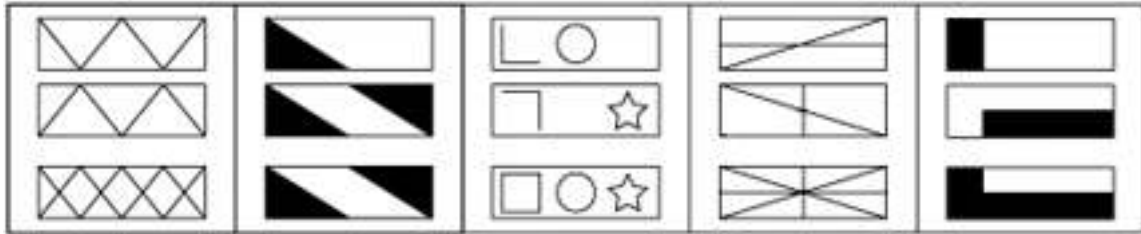
Q13 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: Only the squares are shaded.

Set B: Only the circles are shaded.

Figure: The Figure contains a shaded square and a shaded circle.



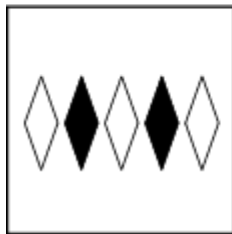
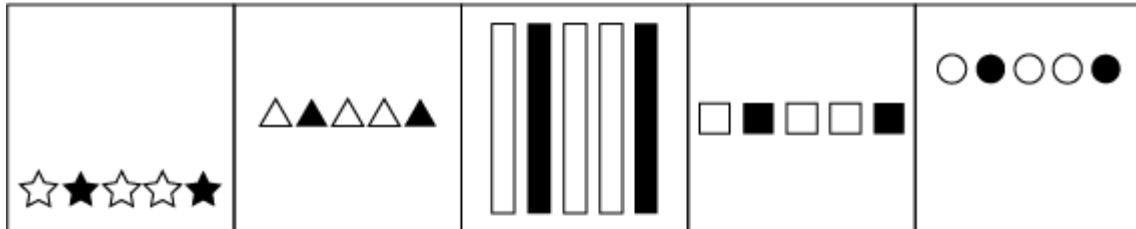
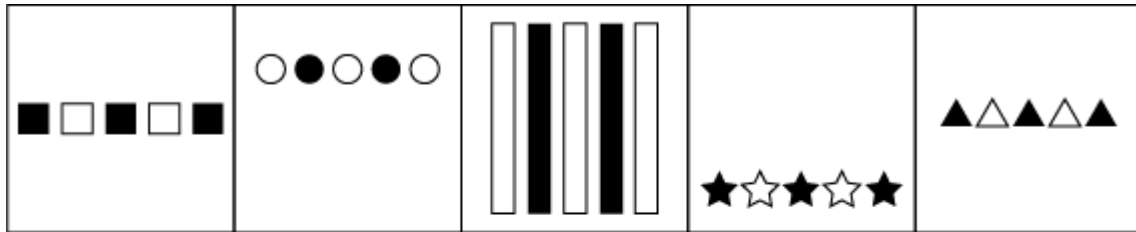
Q14 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: The bottom rectangle is created by superimposing the top two rectangles.

Set B: The bottom rectangle is identical to the top triangle.

Figure: The bottom rectangle is create by superimposing the top two rectangles.



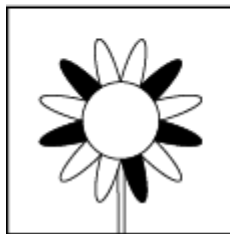
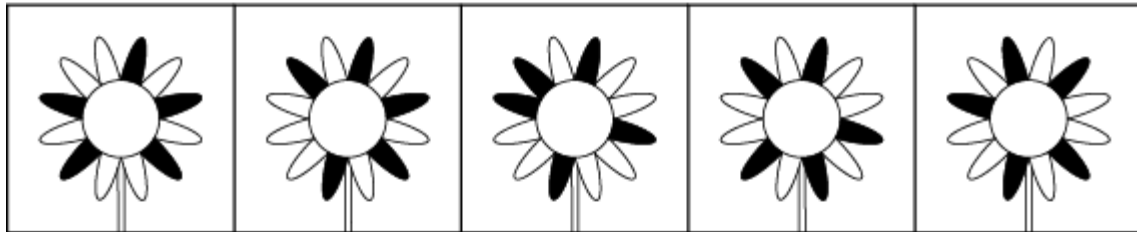
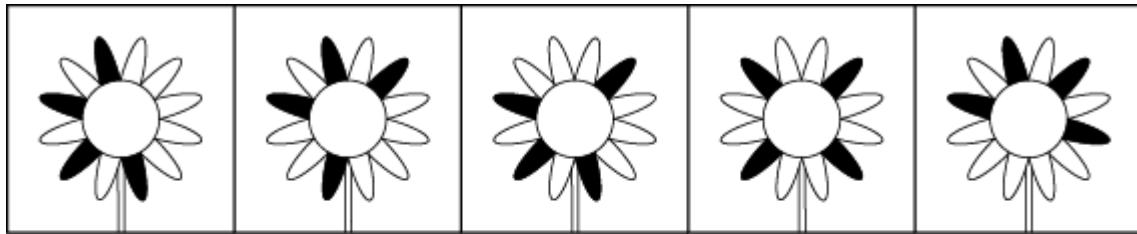
Q15 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: From left to right, the shapes alternate between shaded and unshaded.

Set B: From left to right, the second and last shape in each box is shaded.

Figure: From left to right, the shapes alternates between shaded and unshaded.



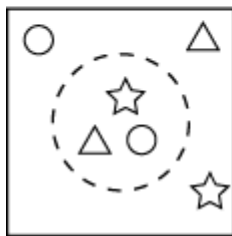
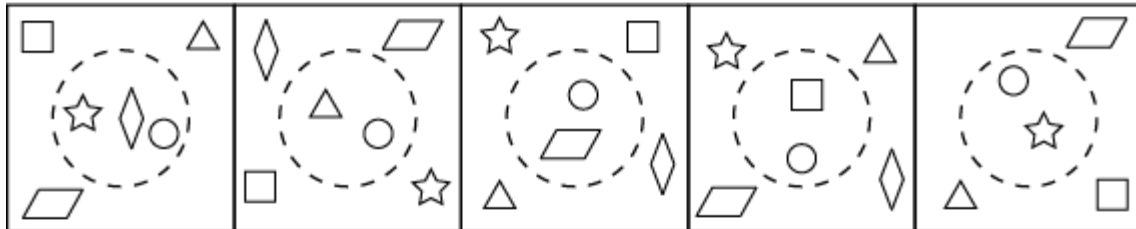
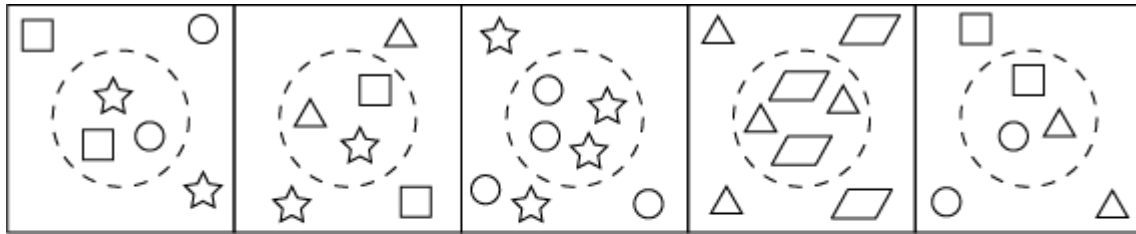
Q16 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each flower has four shaded petals.

Set B: Each flower has five shaded petals.

Figure: The Figure has five shaded petals.



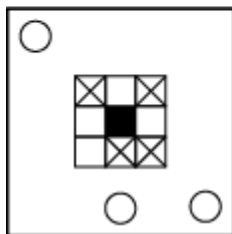
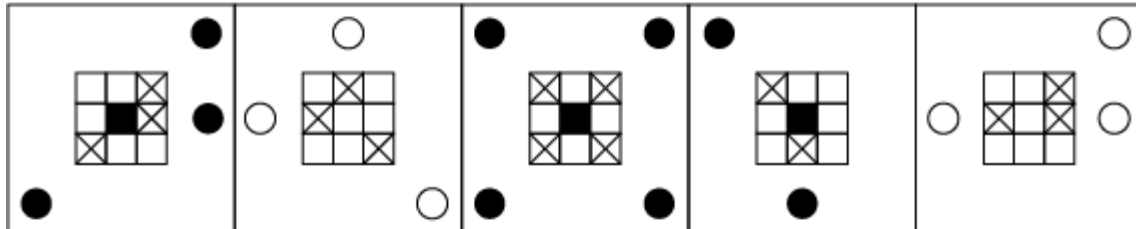
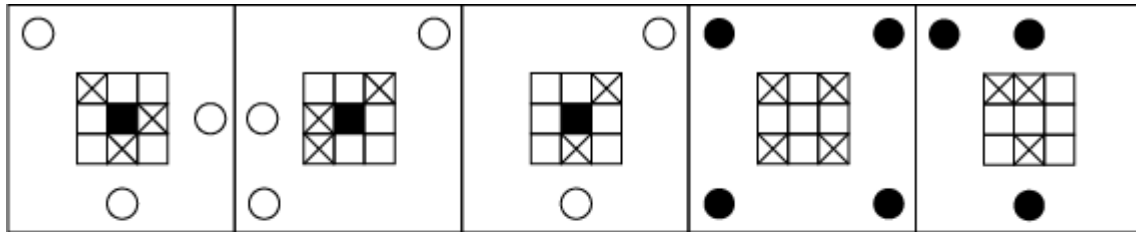
Q17 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: For every shape inside the large dotted circle, there is an identical shape outside of it.

Set B: All of the shapes in each box, whether inside or outside of the dotted circle, are unique.

Figure: For each shape inside the dotted circle, there is an identical shape outside of it.



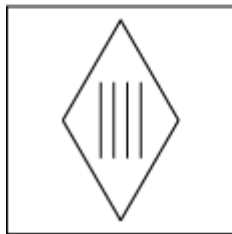
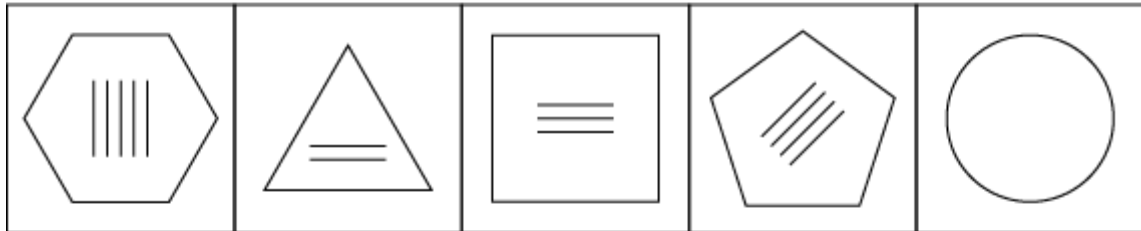
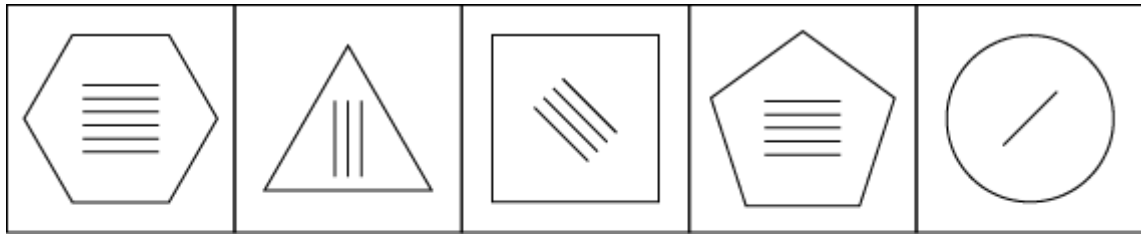
Q18 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: Wherever there is a crossed square, there is a corresponding circle located on the edge of the box. When the centre square is shaded, the circles are shaded.

Set B: Wherever there is a crossed square, there is a corresponding circle located on the edge of the box. When the centre square is shaded, the circles are unshaded and vice versa.

Figure: There is a missing circle, so the Figure does not match either set.



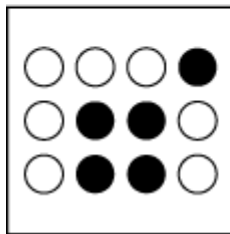
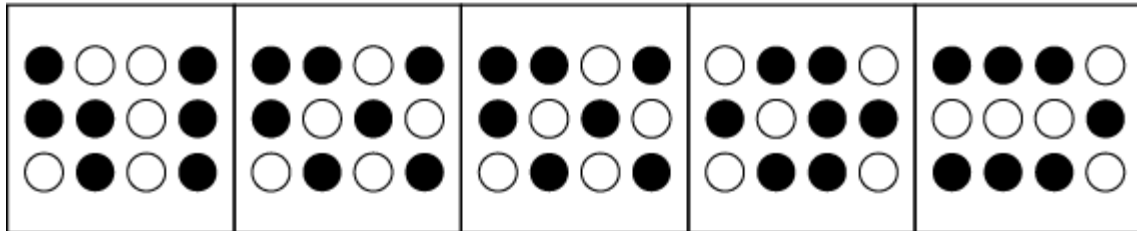
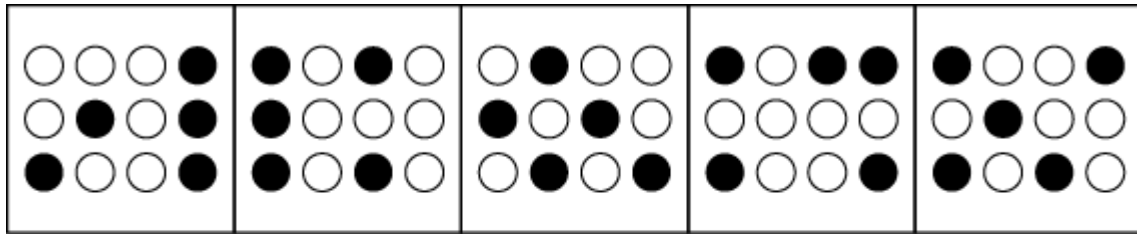
Q19 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: In each box, the total number of lines in the shape is equal to the total number of edges on that shape.

Set B: In each box, the total number of lines is one less than the total number of edges on that shape.

Figure: The shape has four edges and there are four lines.



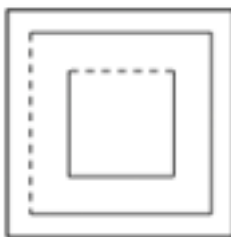
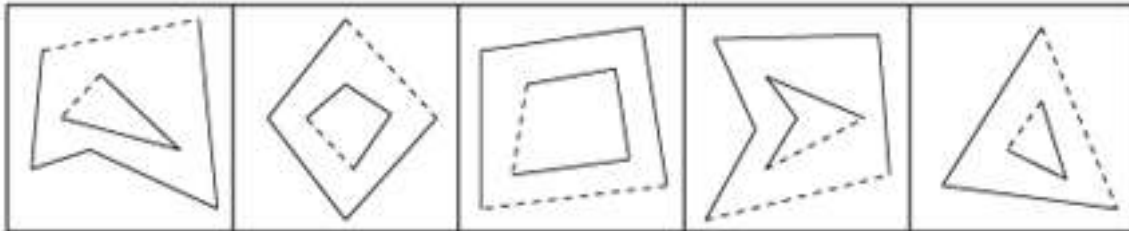
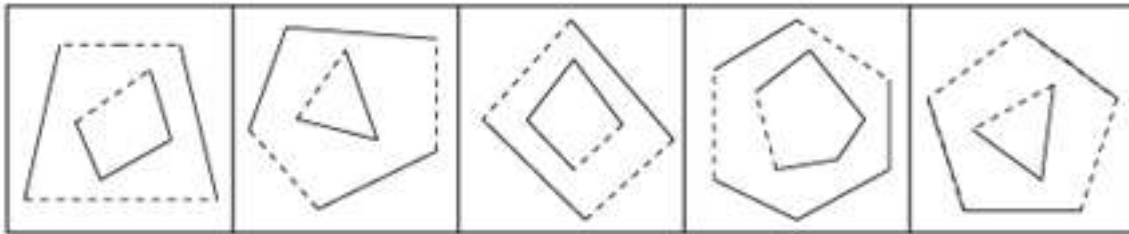
Q20 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each box contains five shaded circles.

Set B: Each box contains five unshaded circles.

Figure: The Figure contains five shaded circles.



Q21 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: Each box contains two shapes: one with two dotted edges and one with one dotted edge.

Set B: Each box contains two shapes: both with one dotted edge.

Figure: Each shape in the box has a single dotted edge.



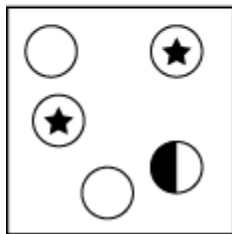
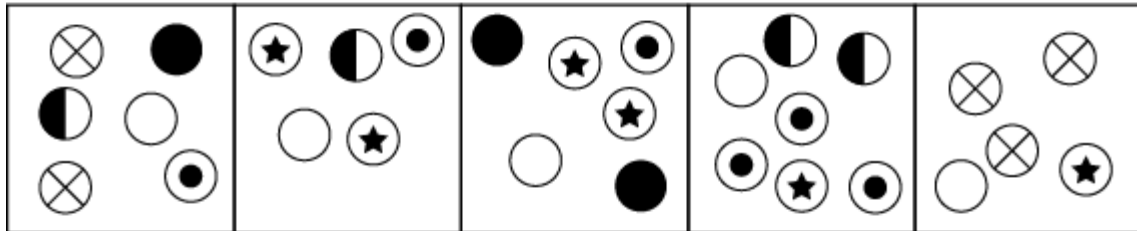
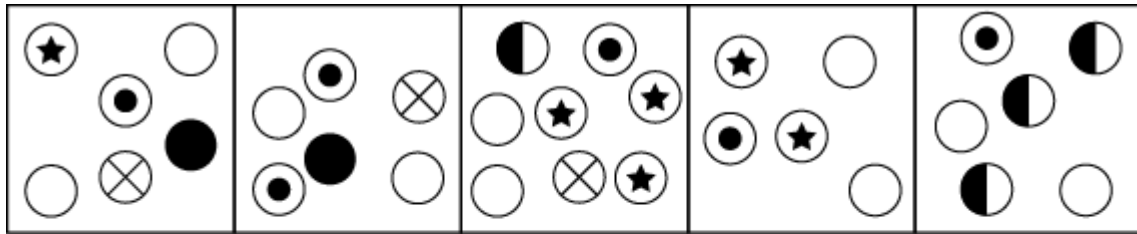
Q22 Which set does the Figure belong to?

- (A) Set A
- (B) Set B**
- (C) Neither set A nor set B

Set A: The shaded star is located at the opposite corner from the missing segment of the circle.

Set B: The shaded star is located at the same corner as the missing segment of the circle.

Figure: The shaded star and missing segment of the circle are at the same corner.



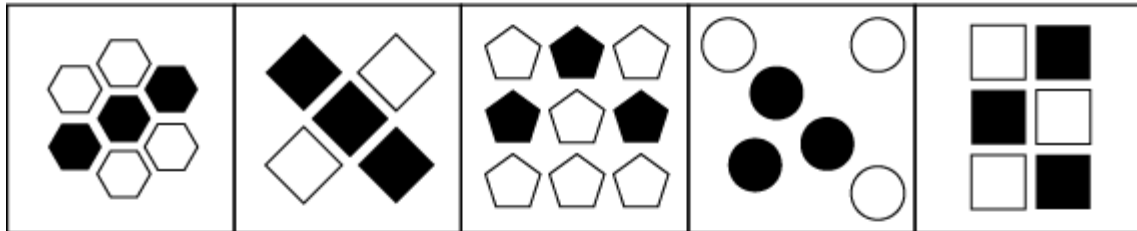
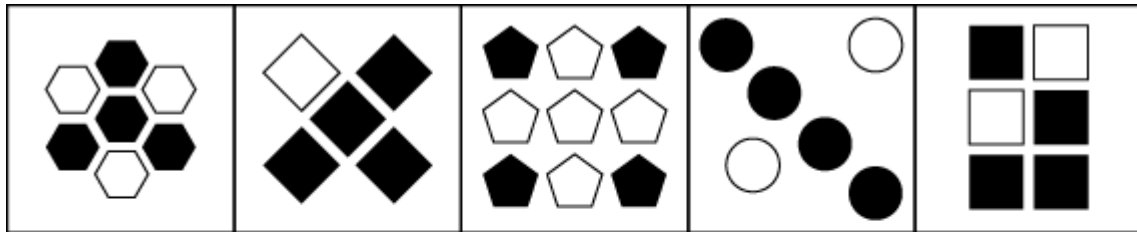
Q23 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each box contains exactly two unshaded, empty circles.

Set B: Each box contains exactly one unshaded, empty circle.

Figure: The Figure contains exactly two unshaded, empty circles.



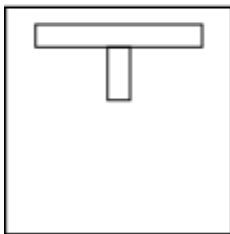
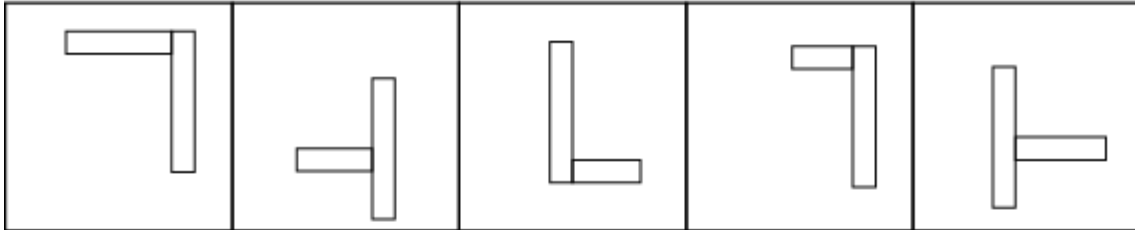
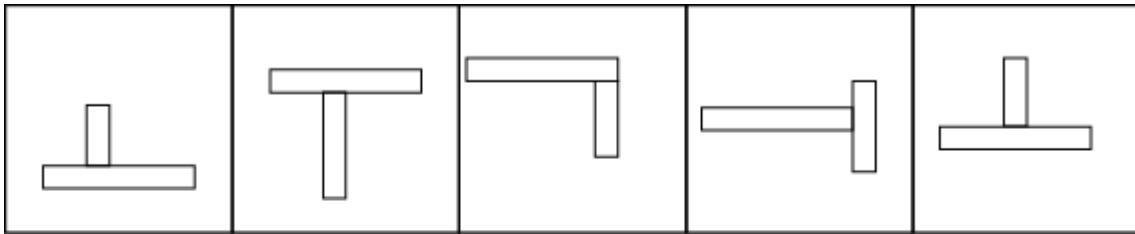
Q24 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: Each box contains four shaded shapes.

Set B: Each box contains three shaded shapes.

Figure: The Figure contains five shaded shapes.



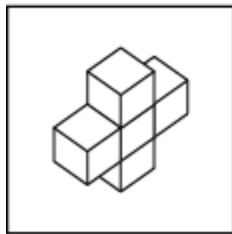
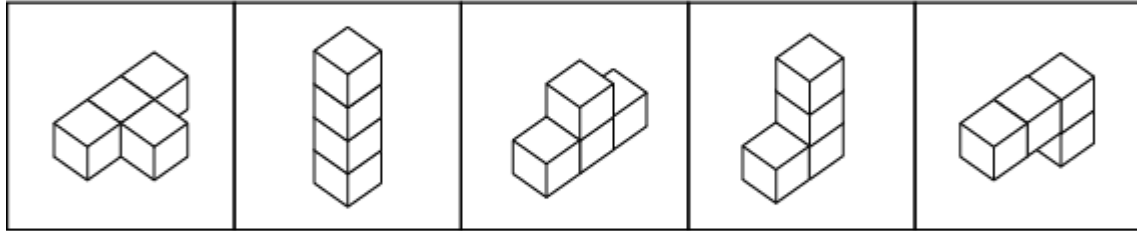
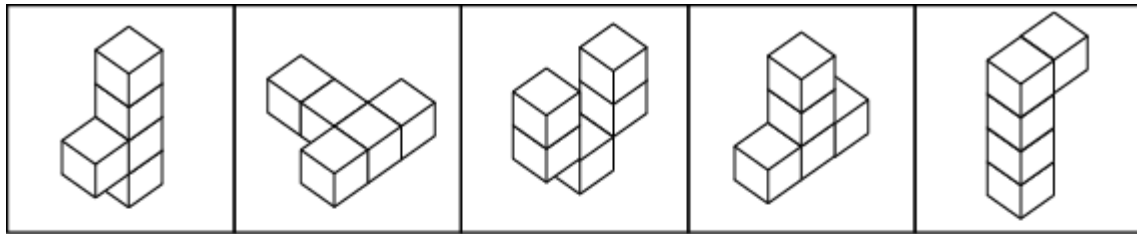
Q25 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: In each box, the horizontal bar is longer than the vertical bar.

Set B: In each box, the vertical bar is longer than the horizontal bar.

Figure: The horizontal bar is longer than the vertical bar.



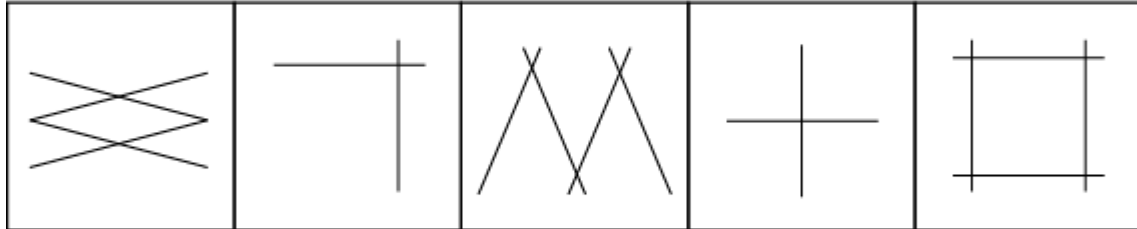
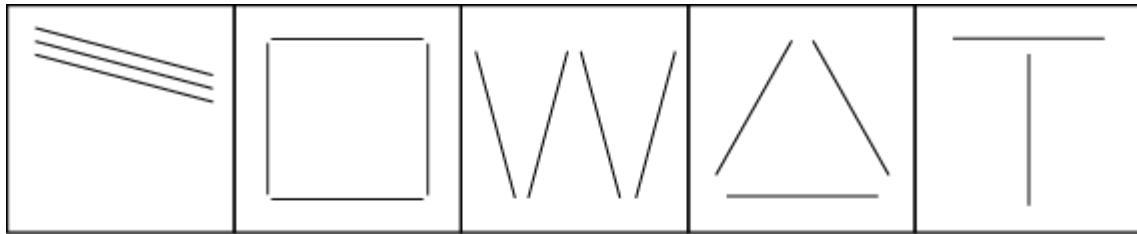
Q26 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each box contains 5 cubes.

Set B: Each box contains four cubes.

Figure: The Figure contains five cubes.



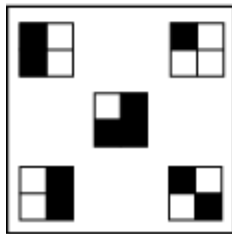
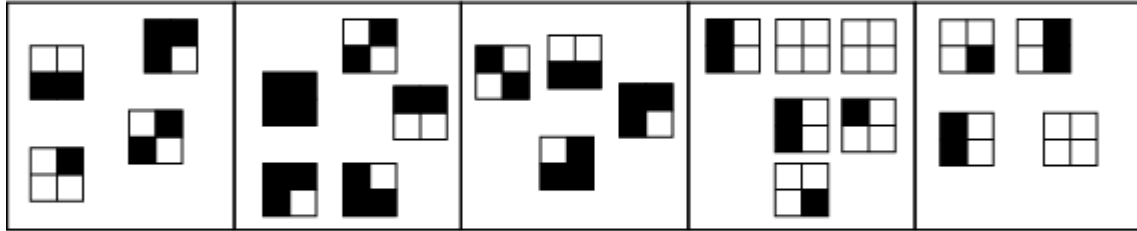
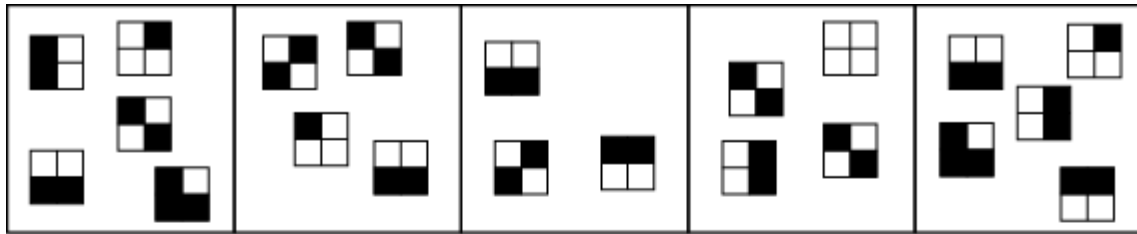
Q27 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: The lines in each box never intersect.

Set B: The lines in each box intersect.

Figure: The lines do not intersect with each other.



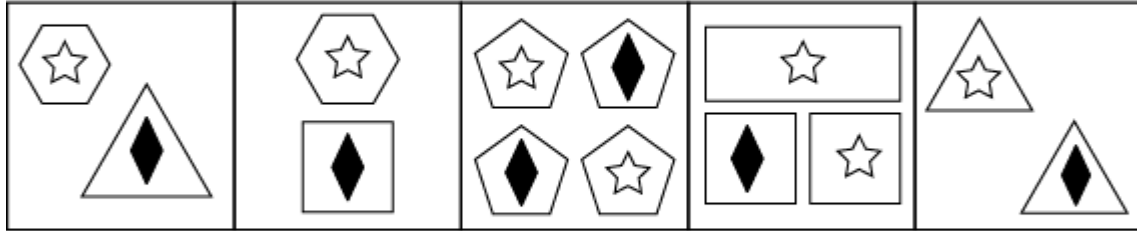
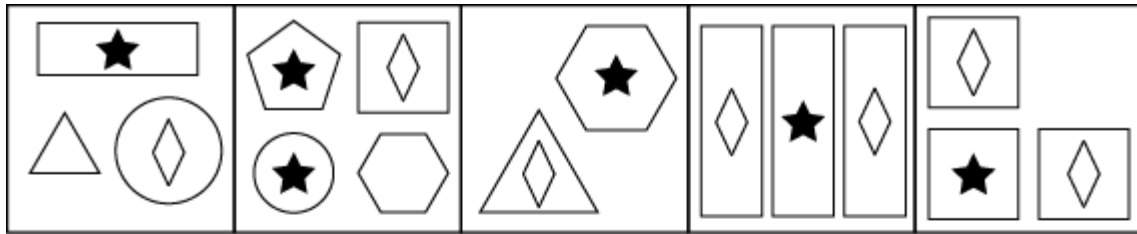
Q28 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B

Set A: Each box contains exactly three half shaded squares.

Set B: Each box contains exactly two half shaded squares.

Figure: The Figure contains three half shaded squares.



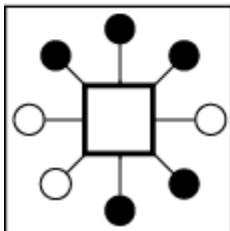
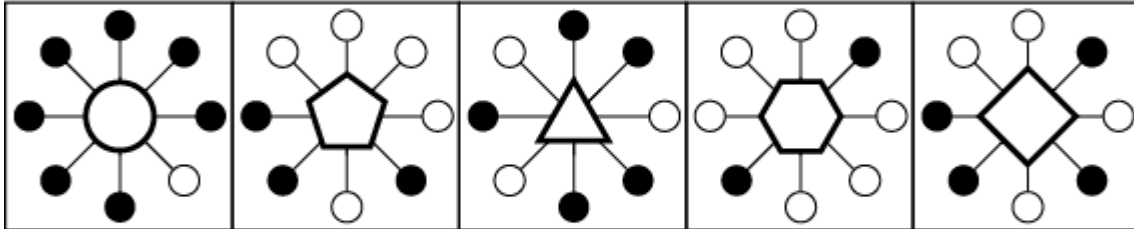
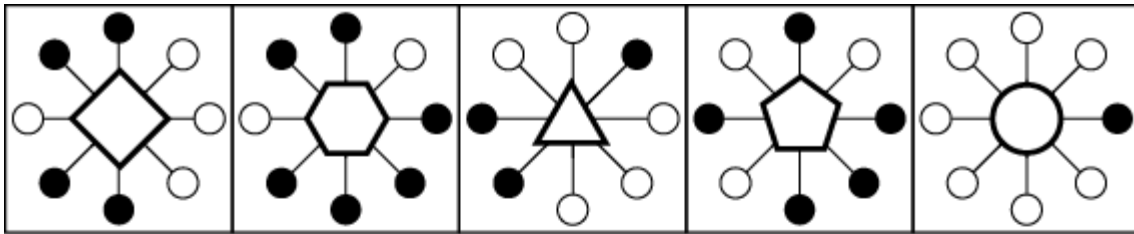
Q29 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: In Set A, only the stars are shaded.

Set B: In Set B, only the diamonds are shaded.

Figure: Both the stars and the the diamond are shaded.



Q30 Which set does the Figure belong to?

- (A) Set A
- (B) Set B
- (C) Neither set A nor set B**

Set A: The total number of edges on the centre shape is equal to the number of shaded circles.

Set B: The total number of edges on the centre shape is equal to the number of unshaded circles.

Figure: The centre shape has four edges, there are five shaded shapes and three unshaded shapes.