

Inductive Reasoning

Free Test 1



Solutions Booklet

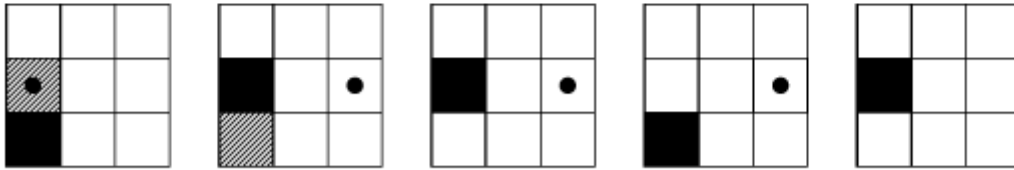
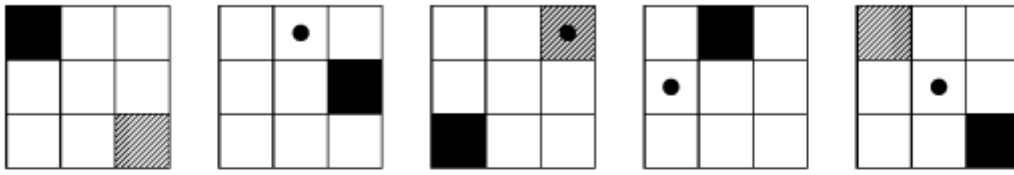
Instructions

This test contains **30 questions**. There is an overall time limit of **25 minutes** for the test.

In each question you will be presented with a logical sequence of five figures. You will need to determine which of the possible answers best matches the next figure in the sequence, or which replaces the question mark.

Each question will have 1 correct answer from a choice of 5 possible answers, and you must select the most correct option.

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



A

B

C

D

E

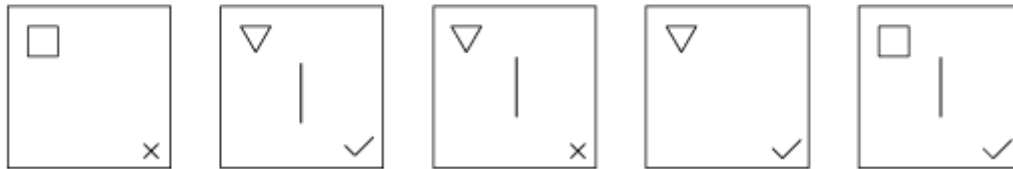
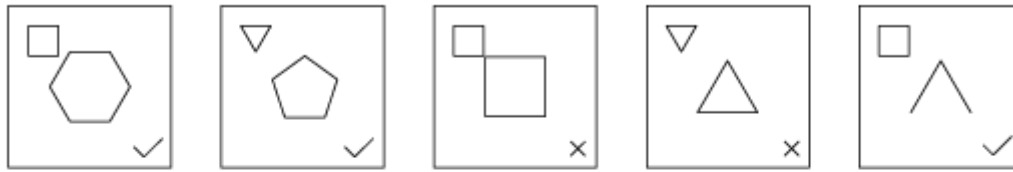
Q1 What comes next in the sequence?

- (A) A
- (B) B
- (C) C**
- (D) D
- (E) E

Rule 1: Each step, the shaded square moves 3 squares clockwise round the edge of the figure.

Rule 2: Each step, the cross-hatching moves 1 square anticlockwise round the edge of the figure, disappearing behind the shading when the two coincide.

Rule 3: The circle (which starts behind the shaded square in figure 1) moves 1 square left to right, starting again at the left of the figure when it drops down a row.



A

B

C

D

E

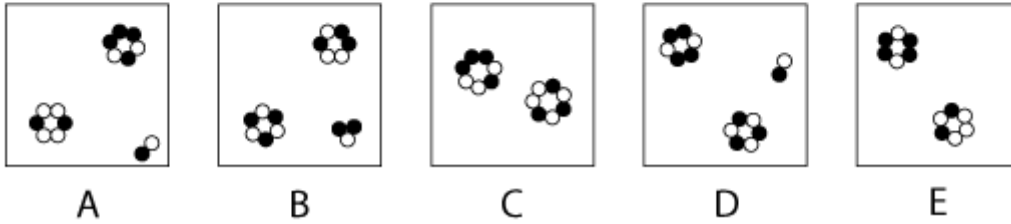
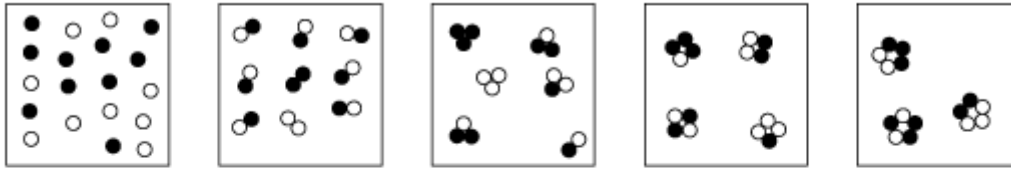
Q2 What comes next in the sequence?

- (A) A
- (B) B**
- (C) C
- (D) D
- (E) E

Rule 1: The shape in the centre comprises 1 fewer straight line every time.

Rule 2: The shape in the top left alternates between being a triangle and being a square.

Rule 3: There is a cross when both shapes have the same number of sides, and a tick when they have different numbers of sides.



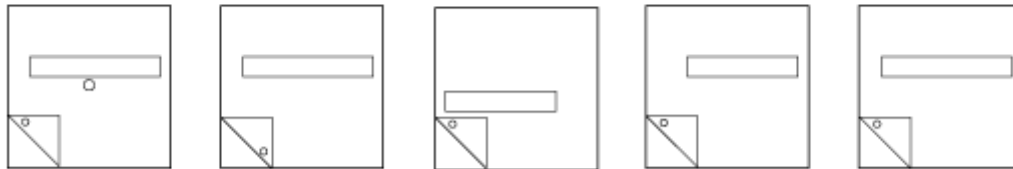
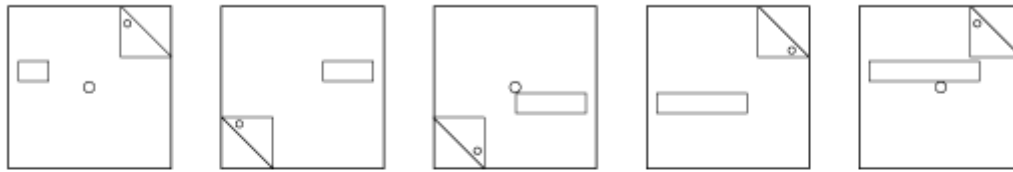
Q3 What comes next in the sequence?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

Rule 1: The number of circles that are grouped together increases by one every time, with the final group containing all the circles that do not fit into a whole group.

Rule 2: One circle is removed every time.

Rule 3: Half of the circles are shaded and half are unshaded. When there is an odd number of circles, the 'extra' circle is shaded.



A

B

C

D

E

Q4 What comes next in the sequence?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E**

Rule 1: The triangle with a dot in one corner alternates between mirrored in a diagonal from the top left of the figure to the bottom right and mirrored in a diagonal from the top right of the figure to the bottom left.

Rule 2: The rectangle alternates between being mirrored vertically and mirrored horizontally.

Rule 3: The rectangle also increases in width by a uniform amount every time, in a direction that is away from the closest edge of the figure.

Rule 4: The circle alternates between being present and absent.



A

B

C

D

E

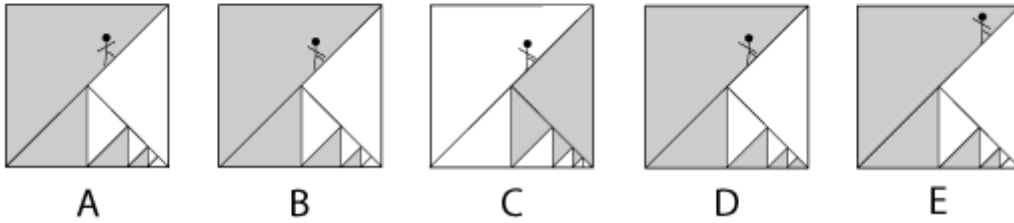
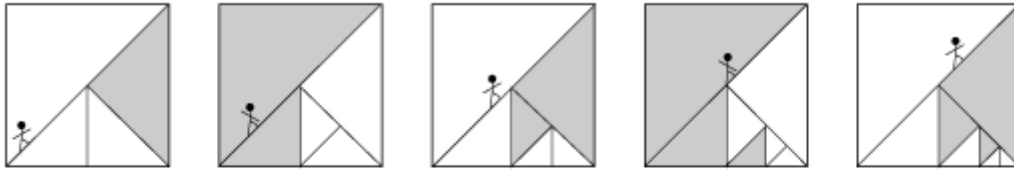
Q5 What comes next in the sequence?

- (A) A
- (B) B
- (C) C
- (D) D**
- (E) E

Rule 1: The door moves to the right, centre, left then centre, always in line with the window immediately above it, and then the pattern repeats.

Rule 2: First only upper storey windows are leaded, then only the lower storey windows are leaded, then all windows are leaded. This pattern then repeats.

Rule 3: Starting at the bottom right window, the figure visits each window in turn in an anticlockwise direction.



Q6 What comes next in the sequence?

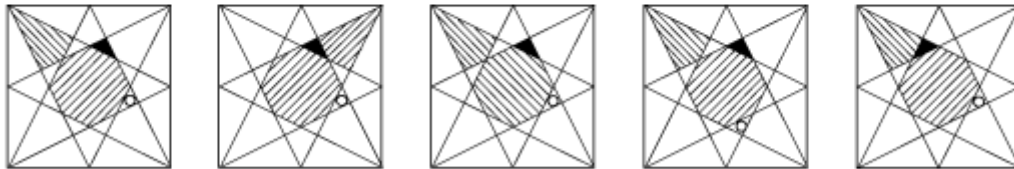
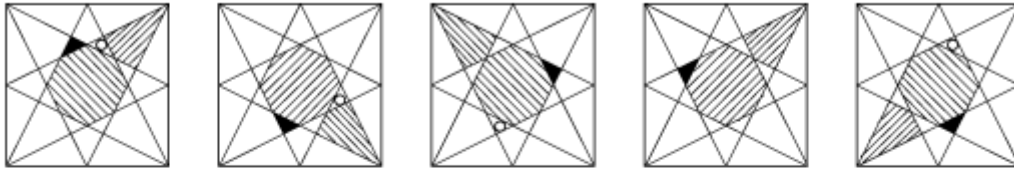
- (A) A
- (B) B
- (C) C
- (D) D
- (E) E**

Rule 1: Every time, the small triangle nearest the bottom right corner is split into two equal triangles of the same proportions.

Rule 2: The two, newly created, smallest triangles are always unshaded. The rest alternate between being shaded and unshaded in each image.

Rule 3: The stick figure moves up the hypotenuse of the largest triangle by an equal amount every time.

Rule 4: The arms on the stick figure alternate between sloping upwards and sloping downwards.



A

B

C

D

E

Q7 What comes next in the sequence?

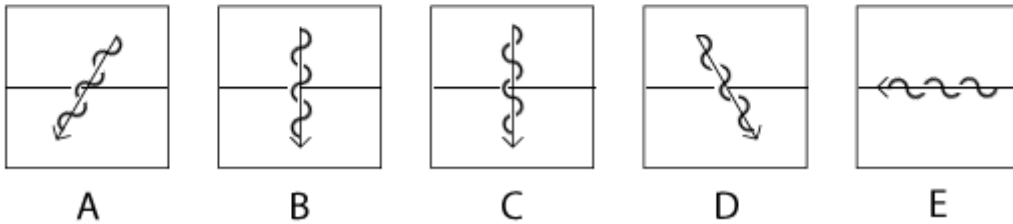
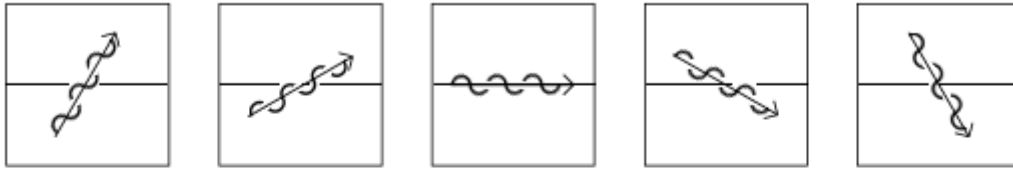
- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

Rule 1: The shading of the small triangles moves 3 triangles anti-clockwise each time.

Rule 2: The cross-hatching on the kite shapes near the corners of the figure, which is always in the direction of the nearest corner, moves clockwise, alternating between moving one shape and moving two.

Rule 3: The centre shapes alternates between having downward sloping cross-hatching and having upward sloping cross-hatching.

Rule 4: The circle moves two small triangles clockwise every time, and is unseen when the triangle is shaded.



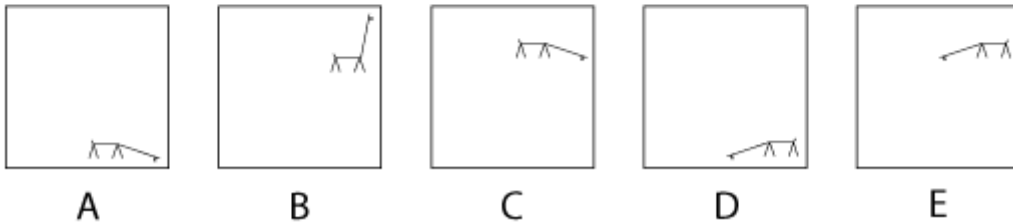
Q8 What comes next in the sequence?

- (A) A
- (B) B
- (C) C**
- (D) D
- (E) E

Rule 1: The direction of the arrow rotates by 30° each time.

Rule 2: Following it in the direction of the arrow, the wavy line alternates between crossing in front of the straight line first and crossing behind it first.

Rule 3: The horizontal line passes behind the wavy line but crosses in front of the straight line.



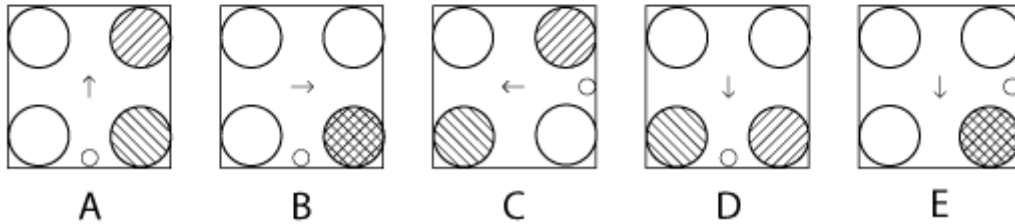
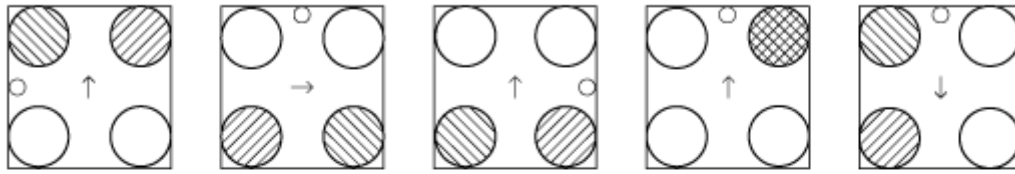
Q9 What comes next in the sequence?

- (A) A
- (B) B
- (C) C**
- (D) D
- (E) E

Rule 1: The matchstick giraffe visits the corners in the order top left, top right, bottom left, bottom right. The sequence then repeats.

Rule 2: The matchstick giraffe faces right when it is at the top and left when it is at the bottom.

Rule 3: The giraffe's neck alternates between being up and down.



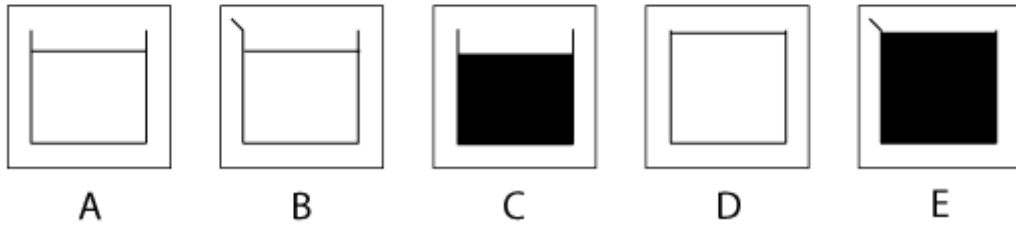
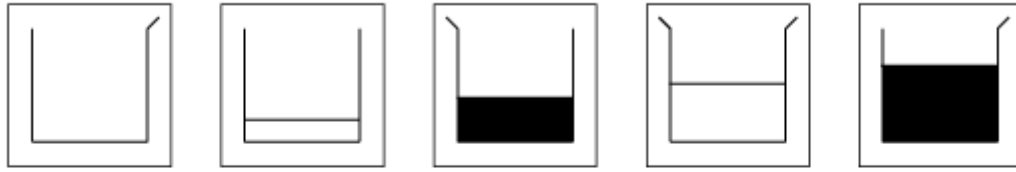
Q10 What comes next in the sequence?

- (A) A
- (B) B**
- (C) C
- (D) D
- (E) E

Rule 1: The downward sloping cross-hatching follows the sequence top right circle, bottom left circle, bottom right circle, top left circle. This sequence then repeats.

Rule 2: The upward sloping cross-hatching follows the sequence top right circle, bottom left circle, bottom right circle. This sequence then repeats.

Rule 3: The arrow points to where the small circle will be in the next figure.



Q11 What comes next in the sequence?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

Rule 1: The level of the liquid in the container rises by a consistent amount every time.

Rule 2: The liquid alternates between being light and dark.

Rule 3: The container has a spout to the right, then no spout, then to the left, then to both left and right. This sequence then repeats.

End of test