

Primary 3 · Mathematics · Maths General Ability II

Figure reasoning 1

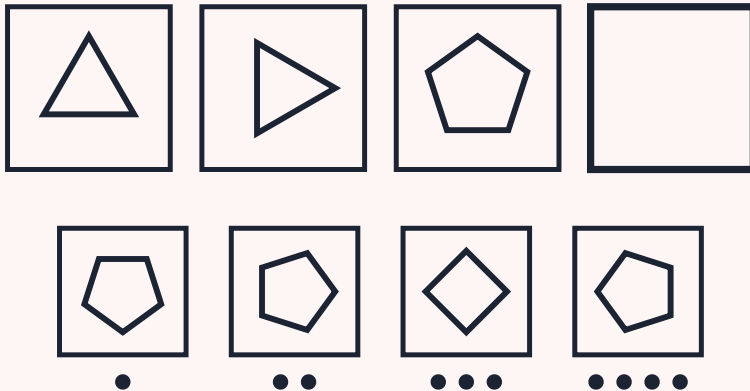
Time **30 min** Marks **8** Questions **8**

Answers are printed in red after each question, with the working where it matters. Marks in brackets show how a marker would split them.

Figure reasoning

Questions 1 to 8 carry 1 mark each.

- 1 A shape is turned one quarter clockwise. The first pair shows a triangle and the second pair starts with a pentagon. Which figure completes the pair? [1]
Write the number of the correct figure.

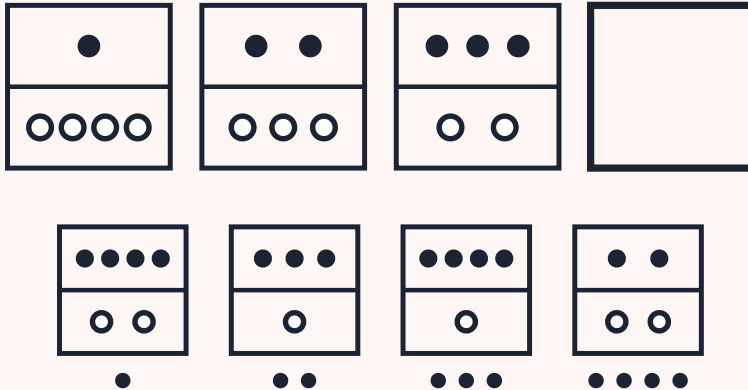


1. The triangle's point moves from the top to the right: a quarter turn clockwise.
2. The pentagon must make the same turn, so its point moves from the top to the right. That is option (2).

ANSWER **2**

- 2 The top row of black dots gains one dot each step and the bottom row of white dots loses one. Which figure comes next?
Write the number of the correct figure.

[1]

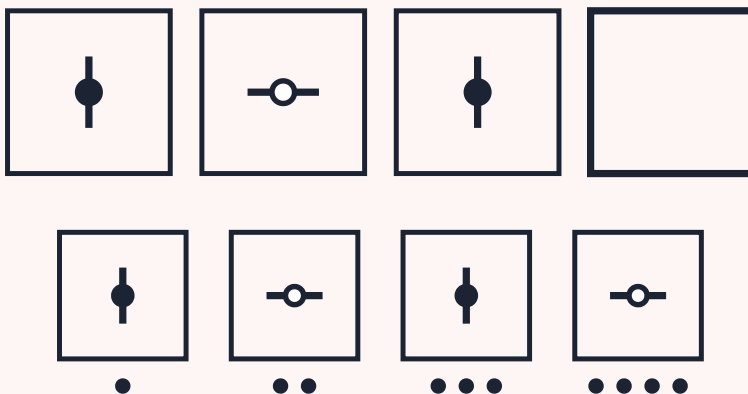


1. Black dots go 1, 2, 3, so the next box has 4.
2. White dots go 4, 3, 2, so the next box has 1.
3. That is option (3).

ANSWER 3

- 3 The arrow turns one quarter clockwise and the centre dot alternates filled, empty, filled. Which figure comes next?
Write the number of the correct figure.

[1]

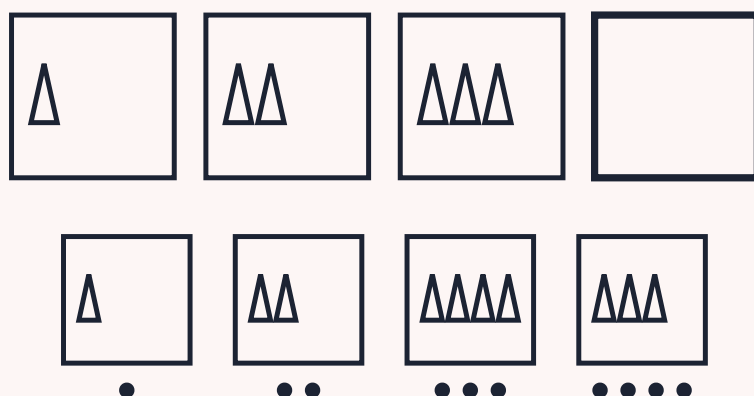


1. The arrow points up, right, down, so next it points left.
2. The dot goes filled, empty, filled, so next it is empty.
3. That is option (4).

ANSWER 4

- 4 One more triangle appears at each step. Which figure comes next?
Write the number of the correct figure.

[1]



1. The count of triangles is 1, then 2, then 3.
2. The next figure has 4 triangles, which is option (3).

ANSWER 3

- 5 One more horizontal line appears at each step. Which figure comes next?
Write the number of the correct figure.

[1]

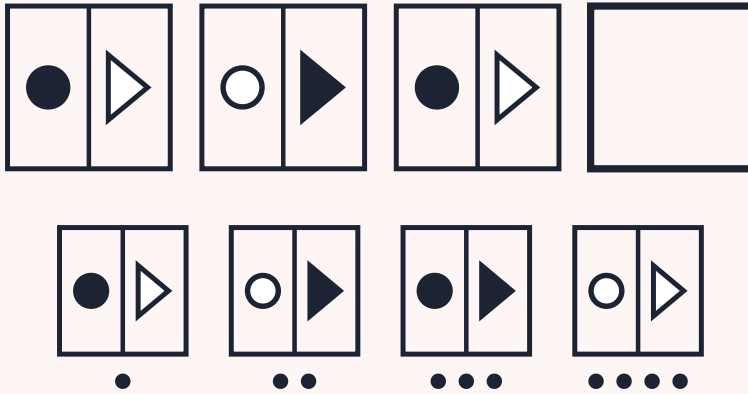


1. The lines go 1, 2, 3, so the next figure has 4 lines. That is option (3).

ANSWER 3

- 6 The circle and the triangle swap colour at every step. Which figure comes next?
Write the number of the correct figure.

[1]

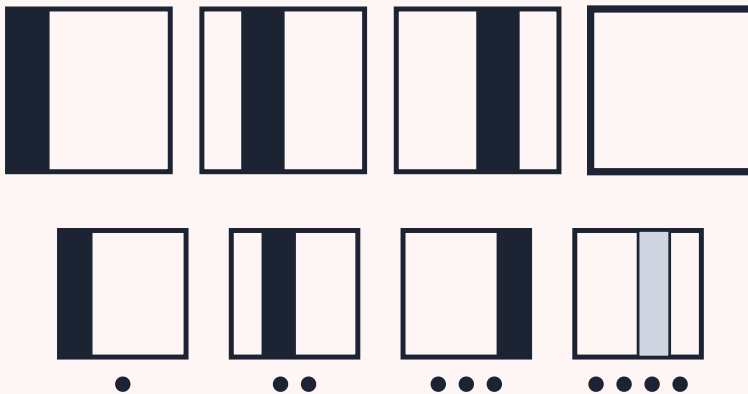


1. Step 1 has a black circle and a white triangle. Step 2 swaps them. Step 3 swaps back.
2. Step 4 swaps again: a white circle and a black triangle, which is option (2).

ANSWER 2

- 7 The shaded column moves one place to the right each step. Which figure comes next?
Write the number of the correct figure.

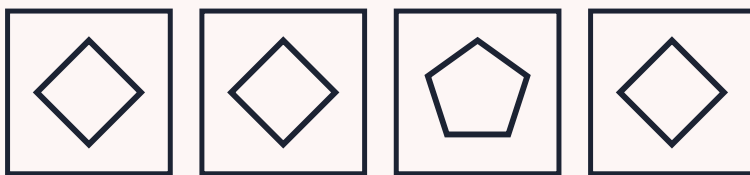
[1]



1. The column stands in the first place, then the second, then the third.
2. Next it stands in the fourth place, which is option (3).

ANSWER 3

- 8 Three of the figures are the same shape and one is not. Which is the odd one out? [1]
Count them 1 to 4 from left to right.



1. Figures 1, 2 and 4 all have four sides.
2. Figure 3 has five sides, so it is the odd one out.

ANSWER 3

Marking notes

- 1 mark for the correct number. The working names the rule.

END OF PAPER