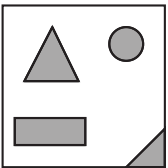
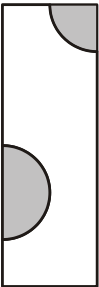
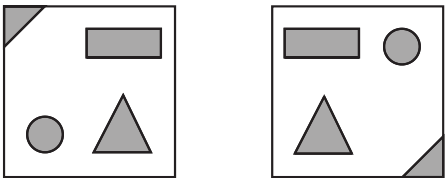
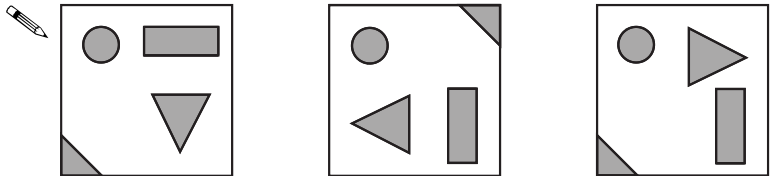


1. Stefan makes this design on a square tile.



He turns the tile.

Put a tick (✓) on the tile below that has the same design as Stefan's tile.



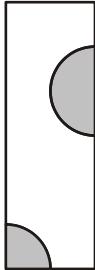
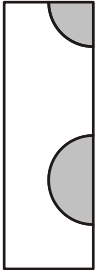
Here is a tile.

The tile is turned.

One of the diagrams

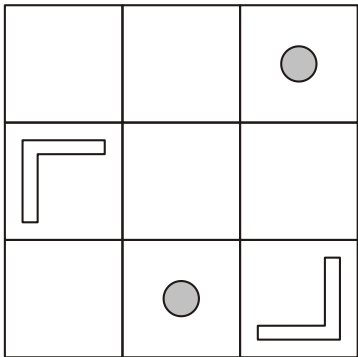
shows the

tile after it has been turned.

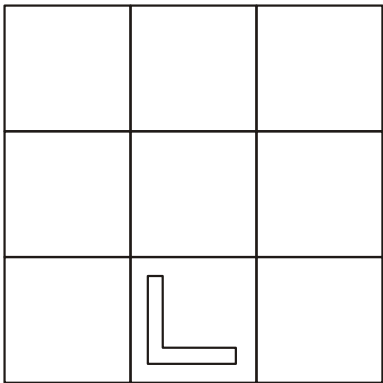


Tick (✓) the correct diagram.

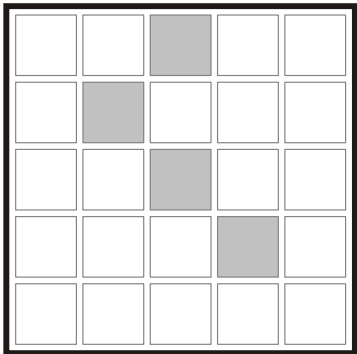
There are four shapes on this diagram.



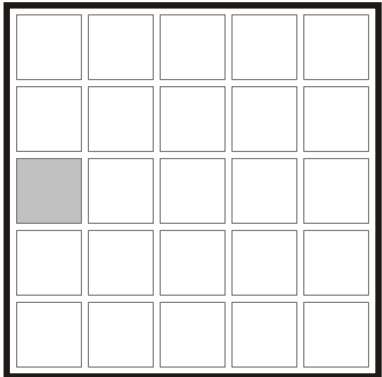
The diagram is turned to the new position on the right.
Draw the three missing shapes.



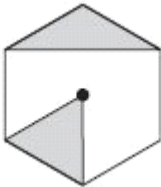
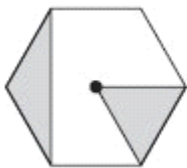
Ben makes this design on a grid.



He rotates the grid to a new position.
Shade in the missing parts of the design.



This pattern is made by turning a shape clockwise through 90° each time.
Draw the two missing triangles on the last shape.

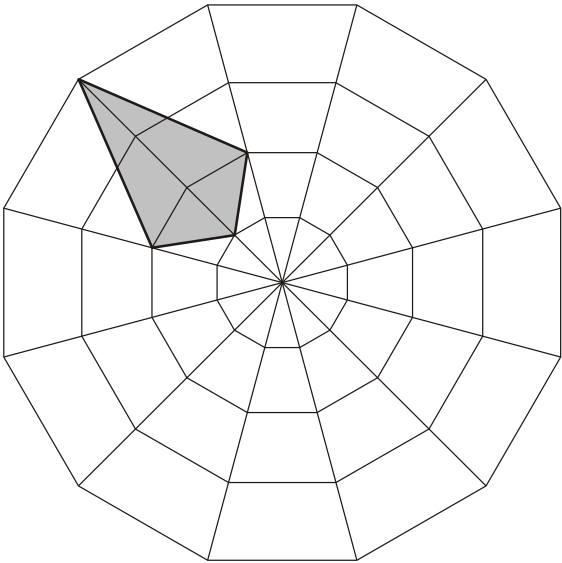


Here is a shaded shape on a grid.

Jamie rotates the shape 90° **clockwise**

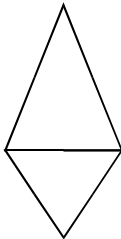
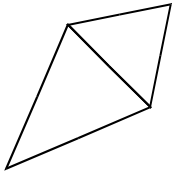
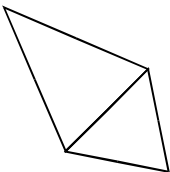
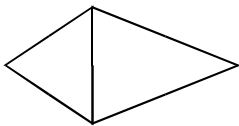
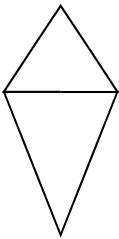
about the centre of the grid.

Draw the shaded shape in its new position.



What will this kite look like after a $\frac{1}{4}$ turn anticlockwise?

Tick (✓) the correct answer.



Here is an arrow.



The arrow is **rotated 90° clockwise**.

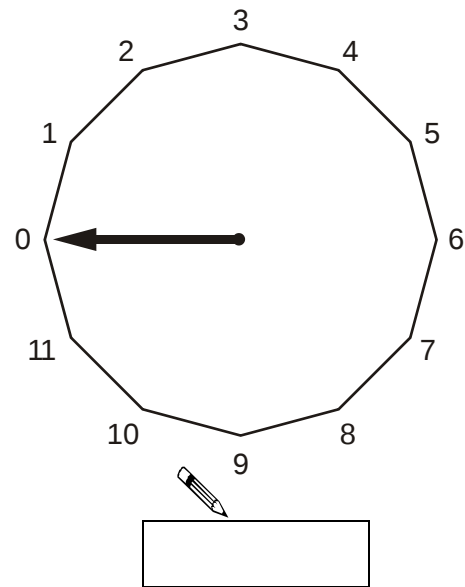
In which direction does the arrow now point?
Put a tick (✓) by the correct answer.

☐☐☐☐☐

This regular 12-sided shape
has a number at each vertex.

Ben turns the pointer from zero, clockwise through 150°

Which number will the pointer now be at?



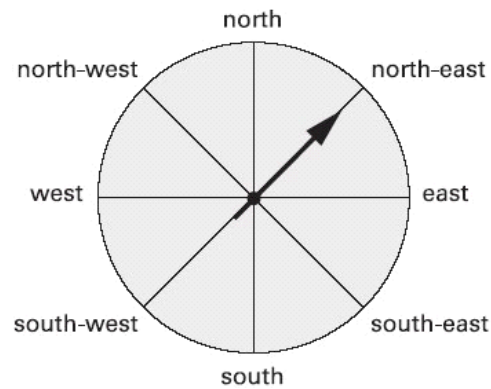
1 mark

Nisha turns the pointer clockwise from
number 2 to number 11

The arrow is pointing **north-east**.

The arrow is moved a **quarter turn clockwise**.

In which direction is the arrow pointing after it is moved?





1 mark

Through how many degrees does the pointer turn?



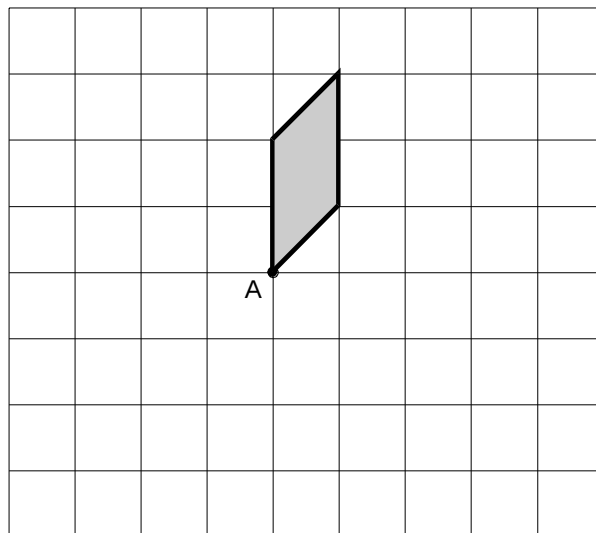
1 mark

Here is a shaded shape on a grid.

The shape is **rotated 90° clockwise** about point **A**.

Draw the shape in its **new position** on the grid.

You may use tracing paper.



This rectangle is **rotated 90° clockwise** about point **A**.

Draw the rectangle in its new position.

You may use tracing paper.

