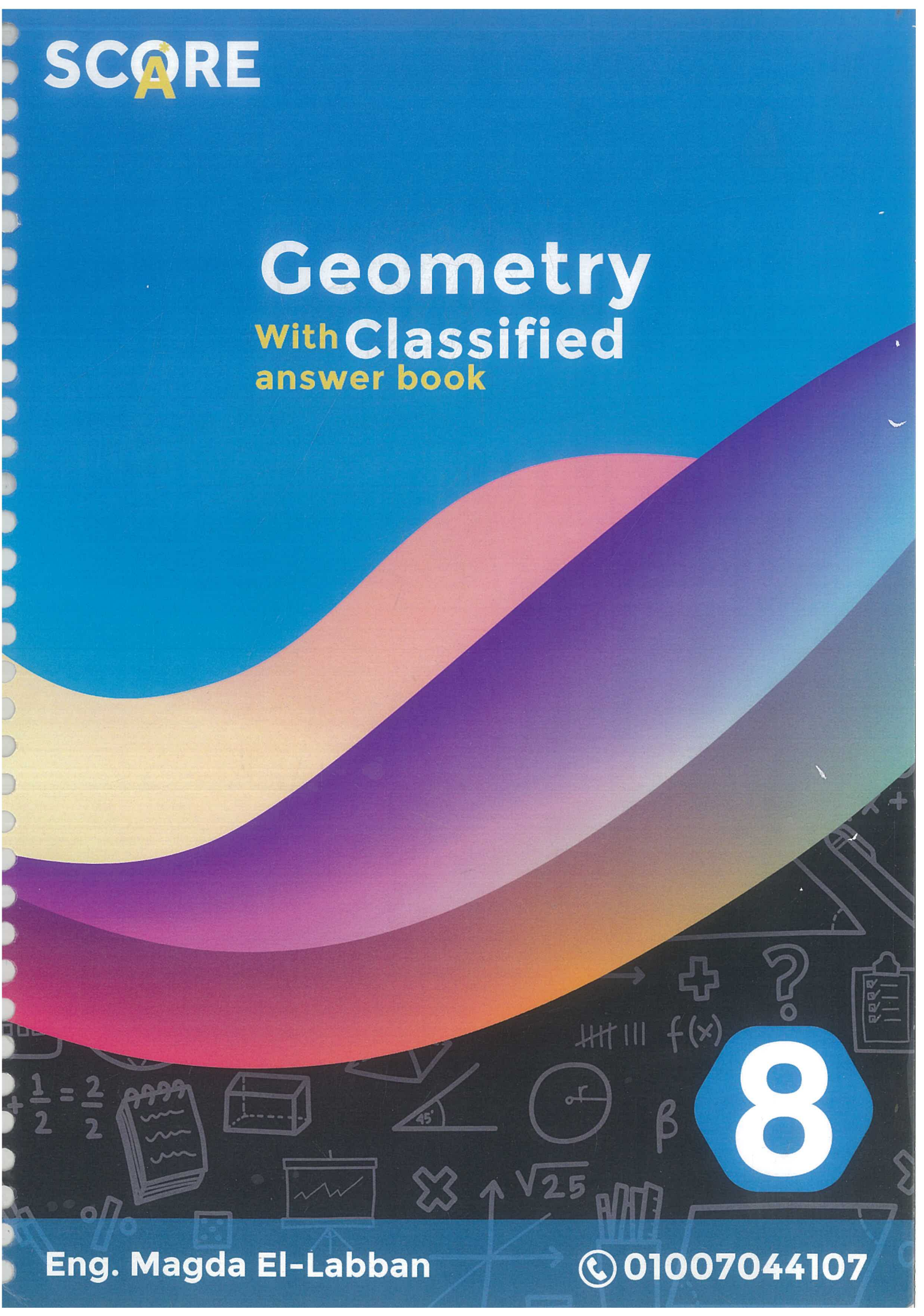
SCORE A

Geometry

With Classified answer book



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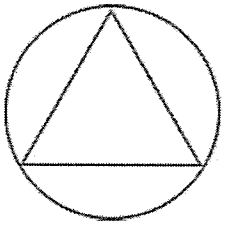
01007044107

11- Symmetry

1. A company is looking at designs for a new logo. These logos are circles that contain regular polygons.

   How many lines of symmetry do the logos have?



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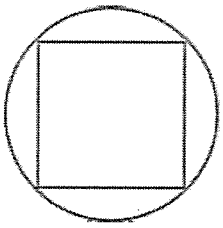

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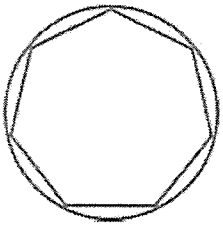

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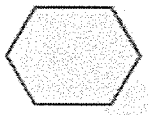
2. How many lines of symmetry do these hexagons have?



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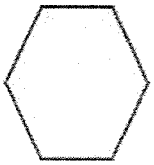

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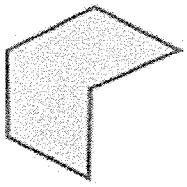

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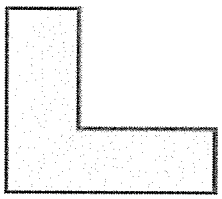

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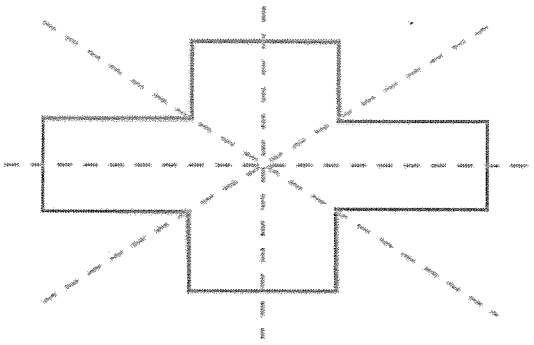
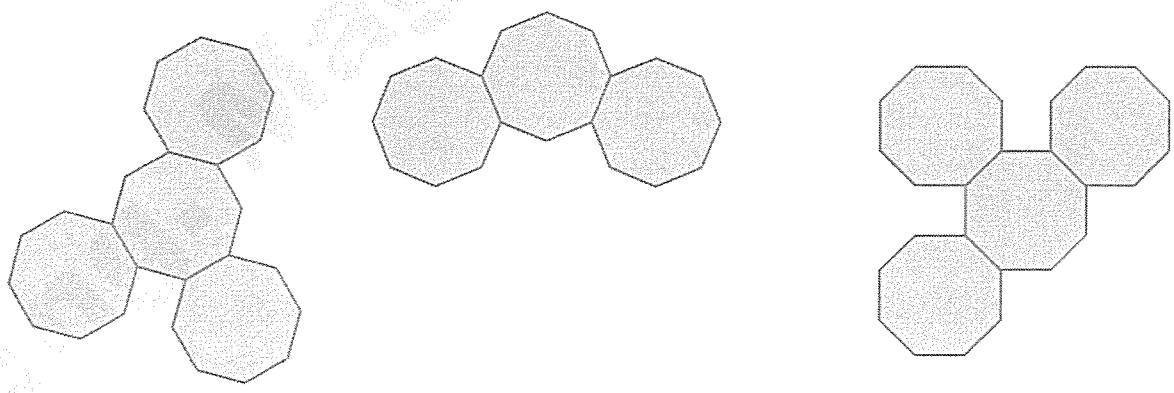
3. Dexter has drawn four lines of symmetry on the shape.



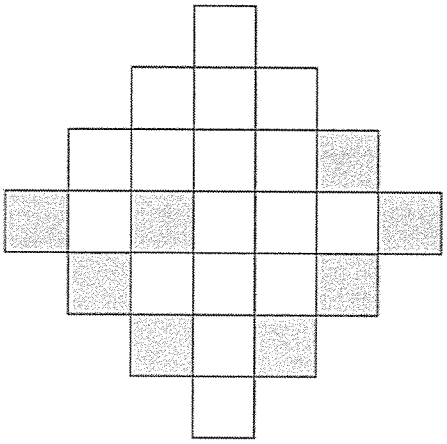
Do you agree with Dexter's choices?Why or why not?

4. These diagrams are made from regular octagons. Draw the line of symmetry on each diagram. Use a ruler.



5. Here is a grid with eight squares shaded in.

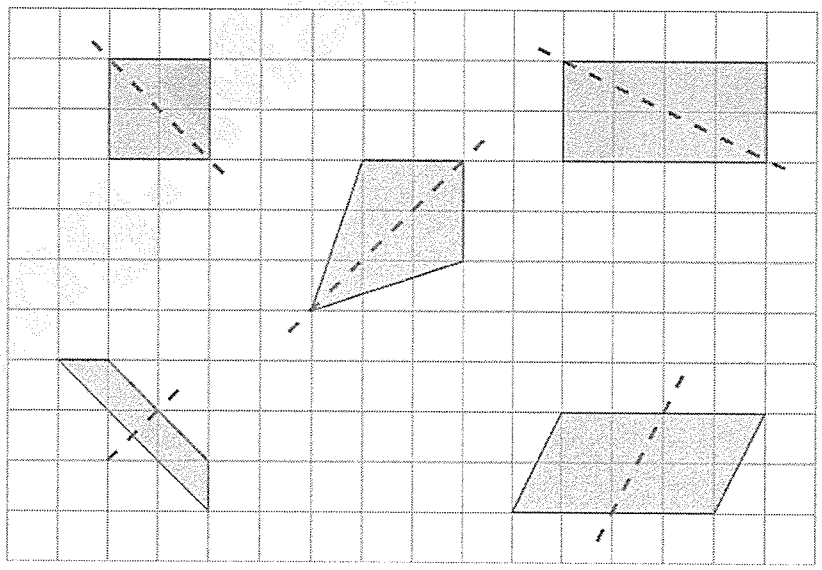
Shade in **two more** squares to make a symmetrical pattern.



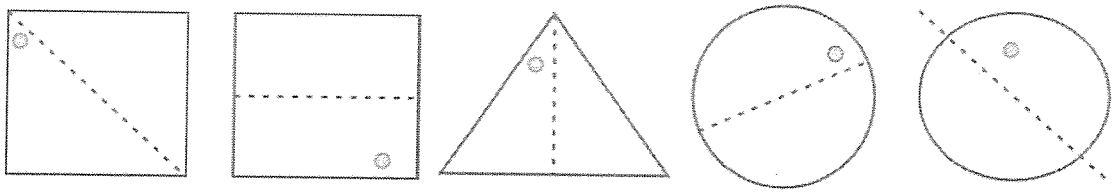
6. Here are five quadrilaterals on a square grid.

A dotted line has been drawn on each quadrilateral.

For each shape, put a tick (✓) if the dotted line is a line of symmetry.
Put a cross (×) if it is not a line of symmetry.

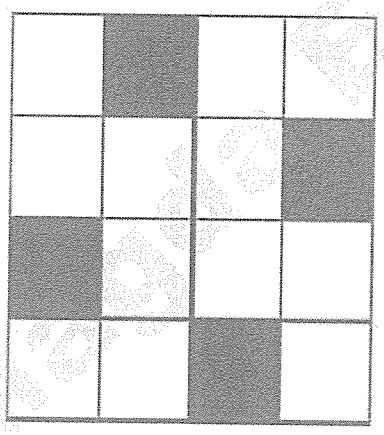


7. Given the line(s) of symmetry, find the other hole(s):



(a) (b) (c) (d) (e)

8. Take any one diagonal as a line of symmetry and shade a few more squares to make the figure symmetric and diagonal.



a) Is there more than one way to do that?

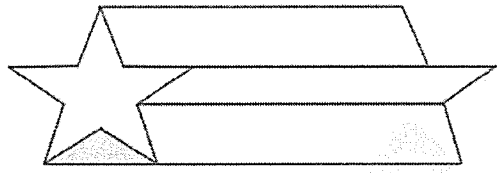
b) Will the figure be symmetric about both the diagonals?

12-Plan symmetry of 3-D shapes

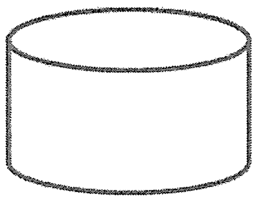
1. The following are 3D shapes. Work out how many planes of symmetry they have.

a)

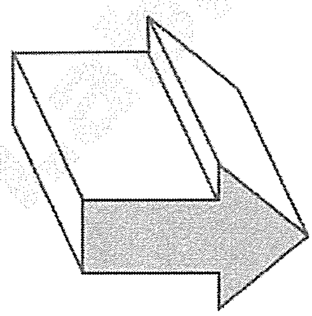
e)



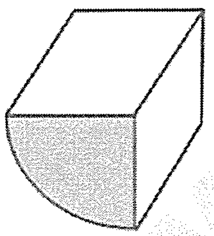
b)



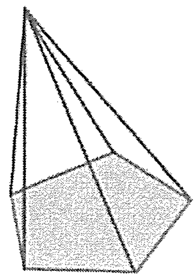
f)



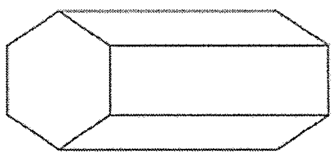
c)



g)

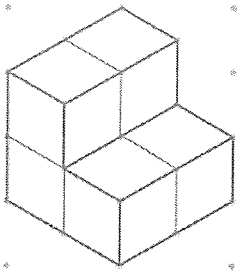


d)

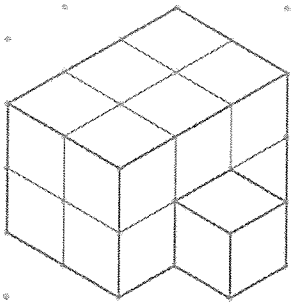


13. Which of these shapes have exactly two plans of symmetry?

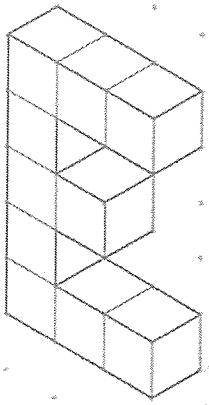
a)



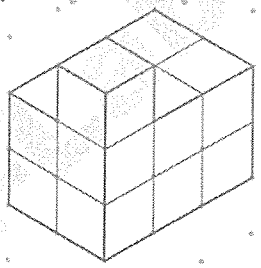
b)



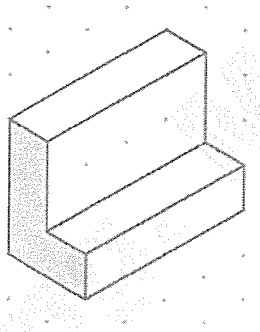
c)

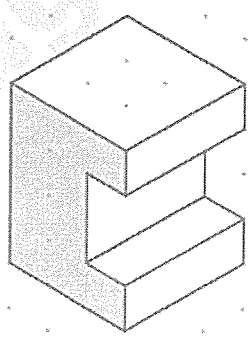


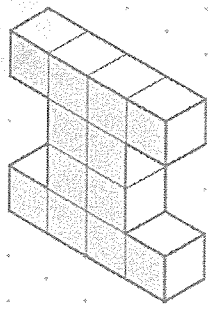
d)

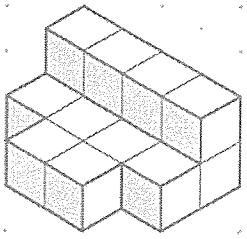


14. Put a ring around all the shapes that have exactly one plane of symmetry.



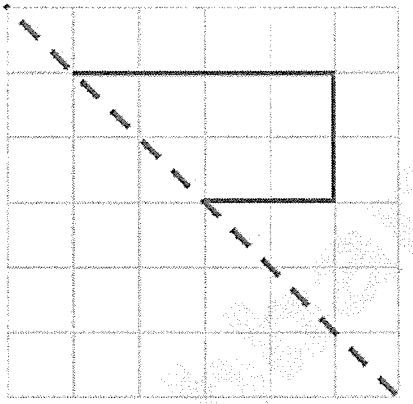






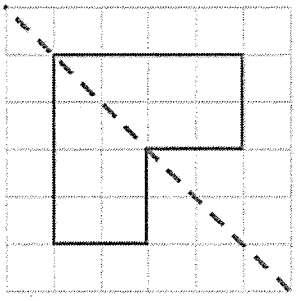
13- Reflection

1. Amir and Mo are both trying to reflect this shape in the line shown.

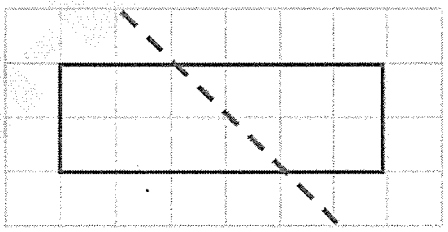


Compare their answers.

Amir



Mo



Who do you agree with? Why? Use a mirror to check.