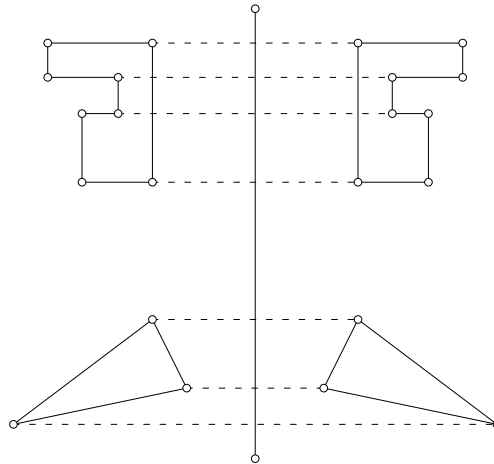


REFLECTIONS

Just as reflections of objects may be seen in mirrors, shapes may be reflected about lines. Examples of shapes and their reflections in a 'mirror line' are shown below.

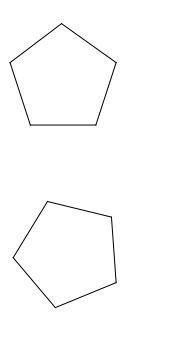
Notice that

- the dotted lines joining points and their reflections cross the mirror line at right angles.
- the distance from the mirror line to each point on the left is the same as the distance from the mirror line to the corresponding reflected point.



The perpendicular grid lines on Geo-Pro can be used to help draw reflections of shapes, by ensuring the above two statements are true. It may help if the corner of the shape nearest to the mirror line is an exact number of centimetres away.

1. Choose any of Geo-Pro's triangles and draw it in three different positions on the left of a mirror line. Use Geo-Pro to draw the three reflections. (Hint: Flip Geo-Pro over to draw the reflected shapes.)
2. Repeat question 1 for a trapezium.
3. Use the 1 cm regular pentagon on Geo-Pro to find the reflections with the shape in positions similar to those below (re-draw your own diagram on separate paper).

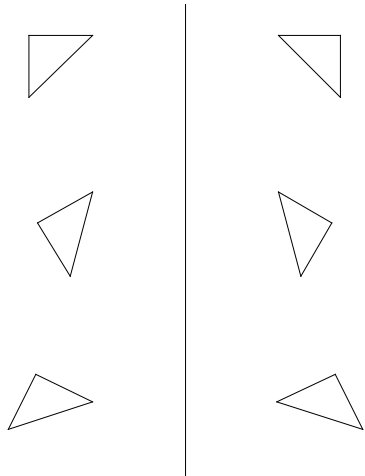


4. Repeat question 3 for a different polygon of more than 5 sides.

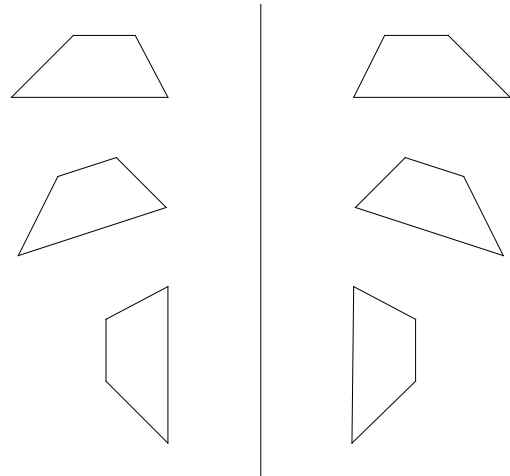
Answers
REFLECTIONS

Answers will vary. Samples appear below.

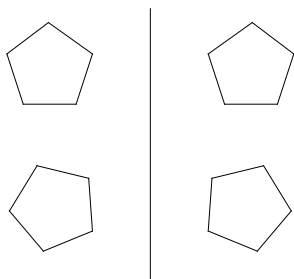
1.



2.



3.



4.

