

9 - 5

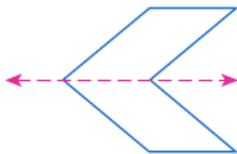
Symmetry

Symmetry

A figure has symmetry if there exists a translation, reflection, rotation or glide transformation, that maps the figure onto itself.

Line Symmetry

A figure in a plane has line symmetry (reflection symmetry) if the figure can be mapped onto itself using a reflection.

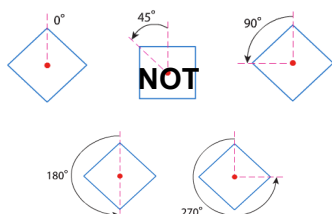


State whether the figures below have symmetry. If so, draw all the lines of symmetry



Rotational Symmetry

A figure in a plane has rotational symmetry if the figure can be mapped onto itself by a rotation between 0 and 360 degrees.



ORDER

The number of times you can rotate an object so that it maps onto itself

MAGNITUDE

Smallest angle at which a rotation exist

$$\text{Mag} = 360 \text{ divided by order}$$

State whether the figure has rotational symmetry. If so, state the order and the magnitude.

a.



b.



c.

