




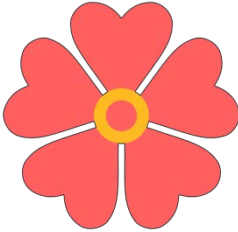
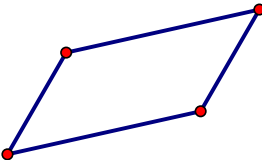



Quick Concept: Line symmetry or reflectional symmetry is when a shape maps onto itself using a reflection. Rotational symmetry is when a shape maps onto itself using a rotation. Rotational symmetry requires an order (number of times it maps onto itself in 360°) and an angle (first angle size to map onto itself).

1) Draw in the lines of symmetry for each of the shapes. If none, leave the diagram blank.

a)	b)	c)	d)
			
e)	f)	g)	h)
		 (Parallelogram)	

2) Use the diagrams from question #1 to determine the order and angle of rotation symmetry for the following shapes. If none, write none.

a) Order = _____	b) Order = _____	c) Order = _____	d) Order = _____
Angle = _____	Angle = _____	Angle = _____	Angle = _____
e) Order = _____	f) Order = _____	g) Order = _____	h) Order = _____
Angle = _____	Angle = _____	Angle = _____	Angle = _____

3) Draw a figure that meets the given symmetry requirements. It must have:

a) line symmetry, but not rotational symmetry.	b) rotational symmetry, but not line symmetry.	c) rotational symmetry and line symmetry.

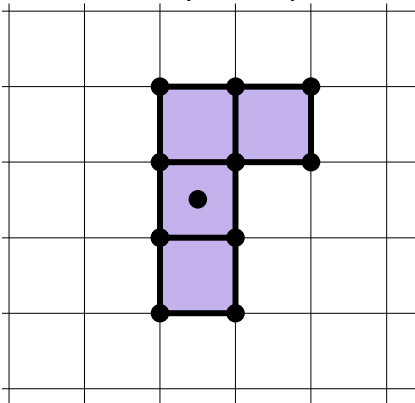


4) a) Draw three different figures, each having exactly one line of symmetry.

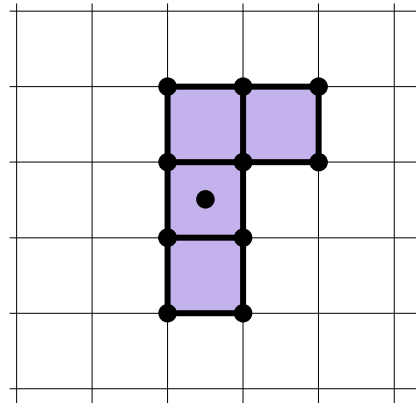
b) Do you notice any similarities in these three shapes?

5) Add blocks to the diagram to form the requirements.

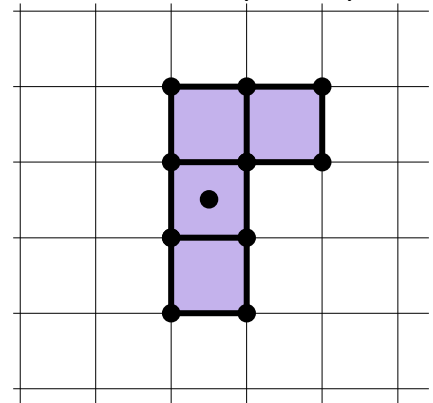
a) Rotational symmetry order of 2 with NO line symmetry.



b) Rotational symmetry order of 4.



c) Rotational symmetry of order 2 and two lines of symmetry.



6) Here are the letters of the alphabet. Classify them into the given categories.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

One Line of Symmetry	Two Lines of Symmetry	Rotational Symmetry
Line & Rotational Symmetry	No Symmetry	