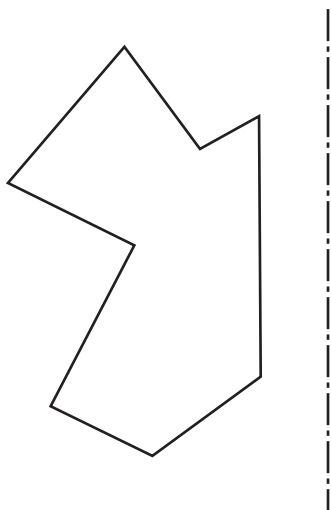
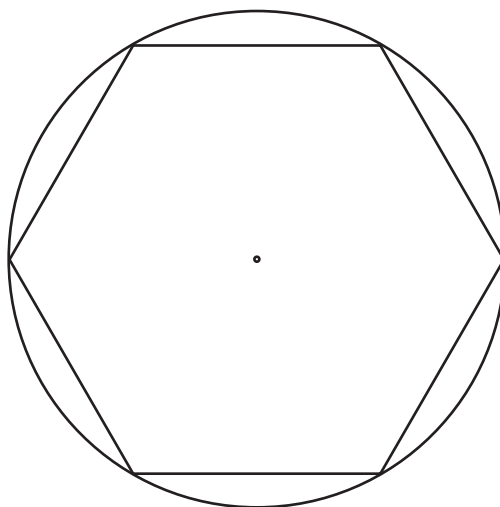


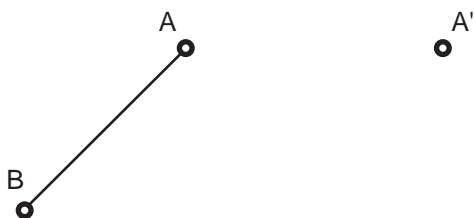
Draw the symmetric figure about the given symmetry axis.



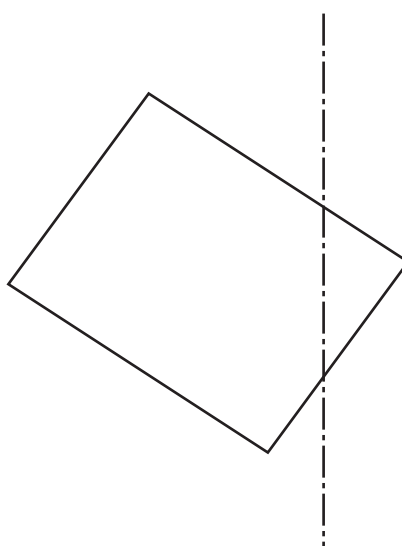
Draw the symmetry axes to the given hexagon.



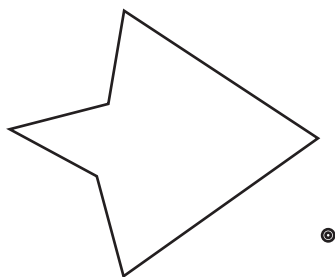
Given the segment AB and a symmetric point A'. Draw the symmetry axis, complete a triangle with a third point C, and draw the symmetric triangle A'B'C'.



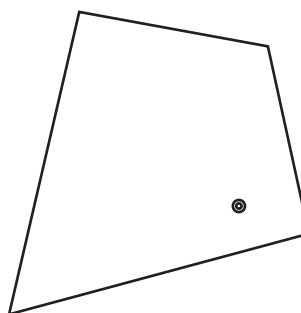
Draw the symmetric quadrilateral.



Draw the symmetric figure around the given symmetry center.



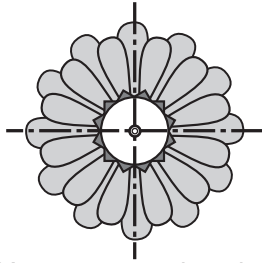
Draw the symmetric figure around the given symmetry center.



Group

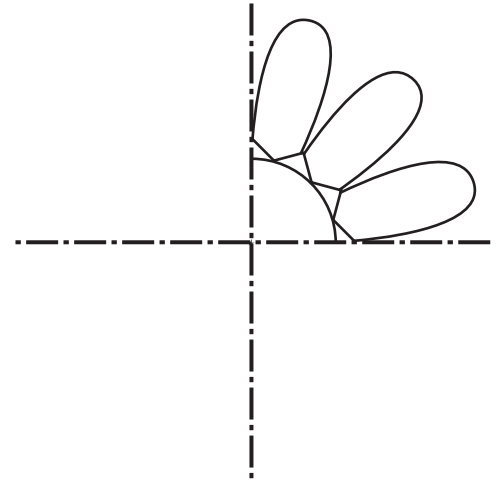
Last names, Name

Date



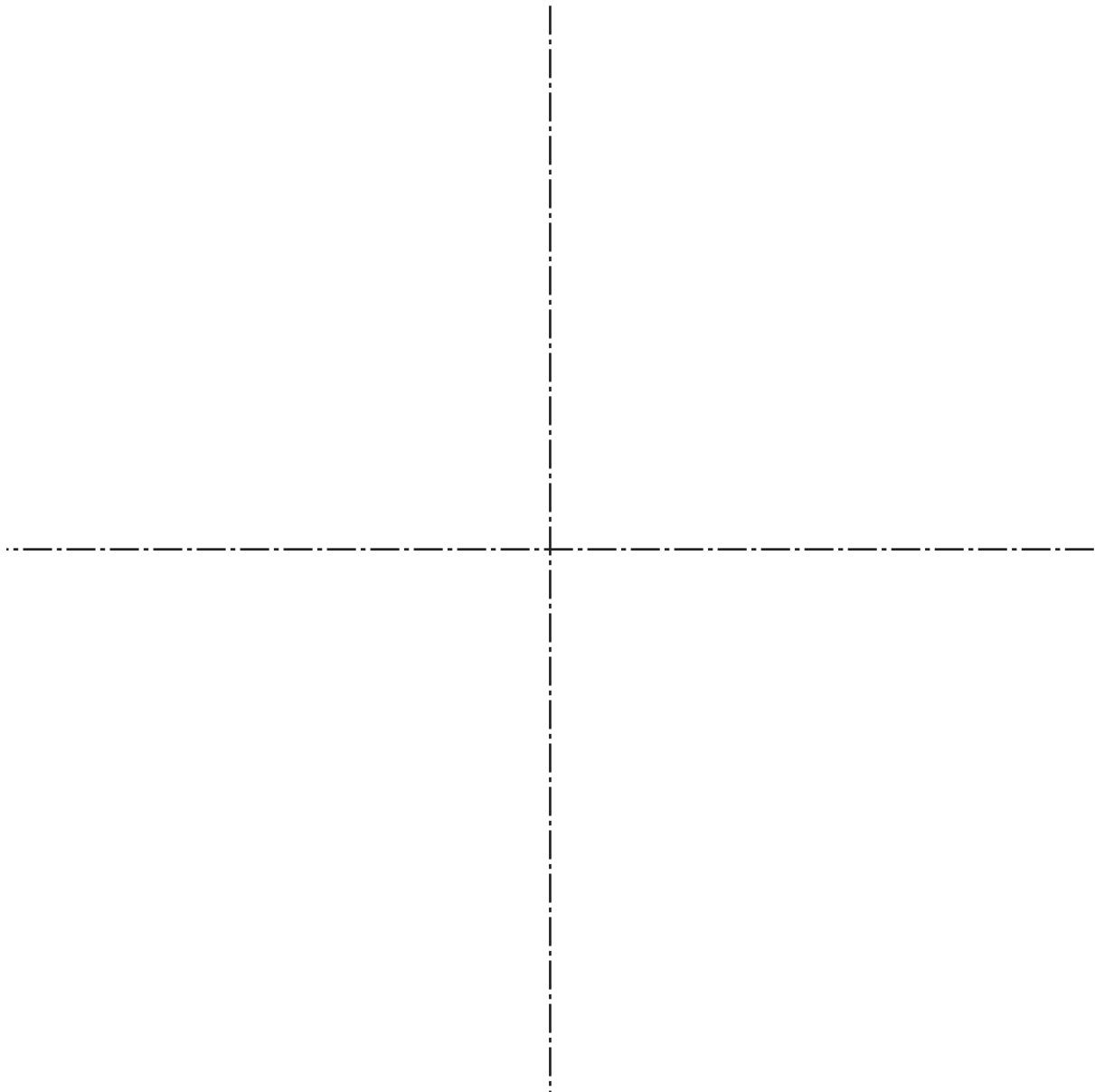
On the left you can see as the flower is divided by two symmetry axes into four symmetric parts. The axes determine the reflexions, and so the image is formed by one part which is reflected four times. (axial symmetry).

At the same time, each element of the image its repeated or reflected, at the same distance, with the same size, and opposite arrangement, but to opposite side of the point where both axes intersect (central Symmetry).



You must complete the small drawing on the right reflecting the given quarter of the drawing. First draw a reflexion of the given part, that way you will have half of the flower. After that reflect that half to complete the drawing. Give color to the result also attending to the reflection rules.

Below you must create your own design. Try to be creative and get an original design, different to the examples. you could draw a wheel, a round stained glass with lots of geometric (or not) elements, etc. Draw first a quarter and then repeat the procedure done in the previous flower example Give color to your design.



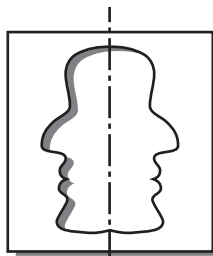
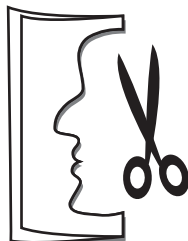
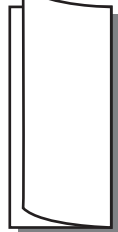
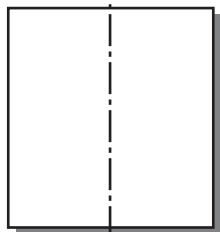
Goup	Last names, Name	Date

In this worksheet you are going to do a drawing or design with one or several symmetries or reflections. The main figure of your artwork will be made of at least two halves which must be a reflection of each other.

1st- Cut out a paper sheet so it has the same size that the given space in this worksheet to work (below).

2nd- Fold it in two halves (do it at least in two halves, but you can fold it in more halves afterwards)...

3º- Cut out figures on the fold sides. the more effort and attention given to cutting out, the more interesting will be the result. Think that the figure/s that you cut will reflect about the fold lines when unfolding the paper sheet therefore creating symmetric figures.



4th- Unfold the paper sheet.


5th- Glue the cut out paper on this worksheet. Give color to your design with markers or pencils, do it on the figures as well as on the layout.

To get a perfect symmetry you need to attend to the reflection rules also when coloring the result of the cut out.

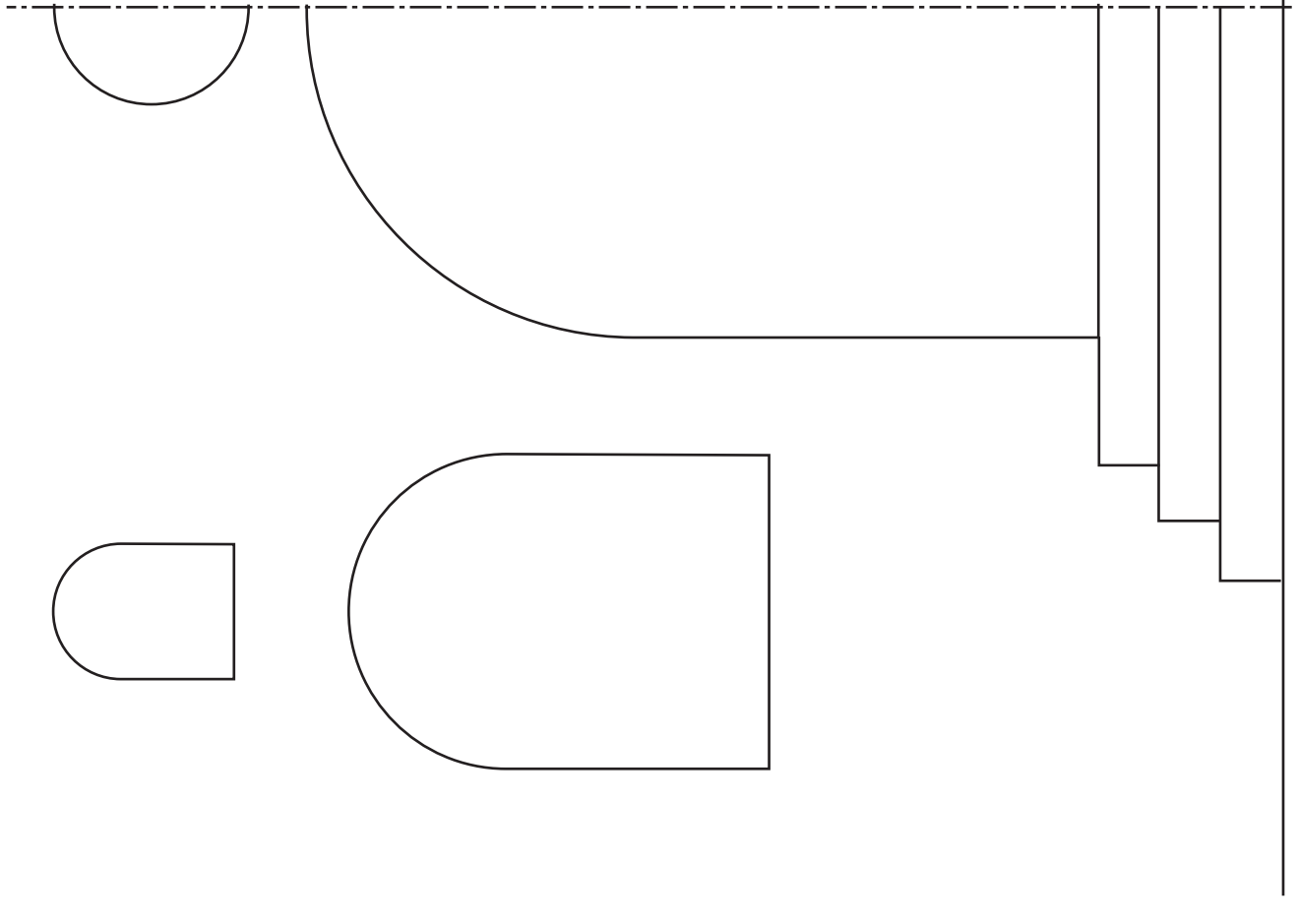
Please be more original than the example above. These drawings are only meant to give you an idea of the process. You can make a better and more complicated design. Fold the paper at least twice and you'll get a much better result attending to symmetries.

Large empty rectangular area for drawing and coloring the papercraft.

Goup	Last names, Name	Date

1º ESO	 laslaminaS.es	Worksheet title
		13- Symmetries colored papercraft

Use line symmetry to complete this facade drawing or front view of a building. Add decorative elements using different shapes and colors which must also follow the line symmetry rules. You can carry out the symmetry either with compass and ruler or just as an apparent symmetry without technical drawing supplies.



Group

Last names, Name

Date

