

## MIRROR MIRROR

**Mirror 1**

**Mirror 2**



Investigate what happens if you reflect the blue flag in Mirror 1, then reflect that image in Mirror 2.

Do you get the same results for the red flag if you reflect it first in Mirror 2 then reflect that image in Mirror 1?

You might like to copy the diagram onto squared paper to help you with this investigation.

Describe the single transformation that takes the first flag to the third flag in this sequence of reflections?

Repeat this with flags in different positions and orientations, and with different pairs of parallel lines. What happens? Does it matter in which line you reflect first?

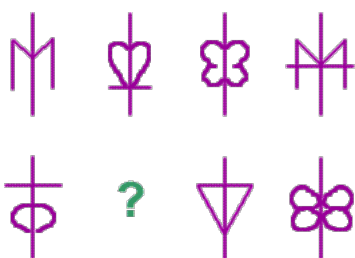
## HELP



Look at your own hands. What do you notice?

Look at yourself in a mirror. What do you notice?

Touch your right ear. What does your reflection do?



Think first about these reflections in one mirror line.

Draw the missing symbol to solve this puzzle

Draw some shapes, draw a mirror line and draw reflections of your shapes in the mirror line.

Use squared paper and draw the reflections as accurately as you can.

## NEXT

Summarise your findings about reflections in parallel mirrors in exactly 20 words (!)  
 What would happen if the lines were not parallel?

If you have Geogebra you may be able to create dynamic geometry files that demonstrate this work.

