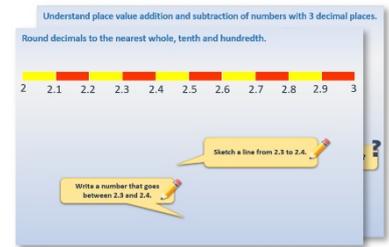


Week 7, Day 5

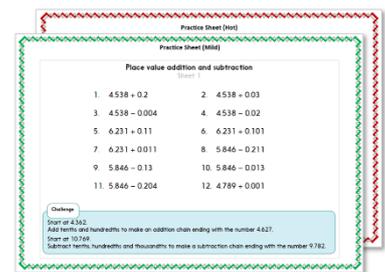
Symmetrical shapes

Each day covers one maths topic. It should take you about 1 hour or just a little more.

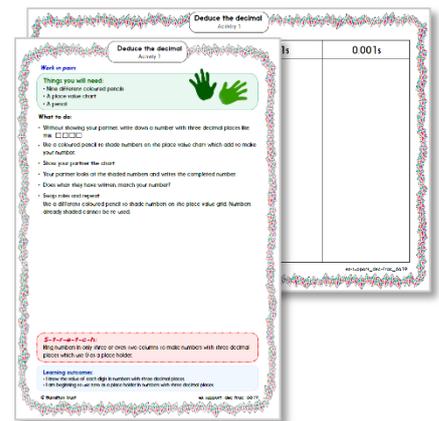
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

Learning Reminders

Complete shapes with a line of symmetry.



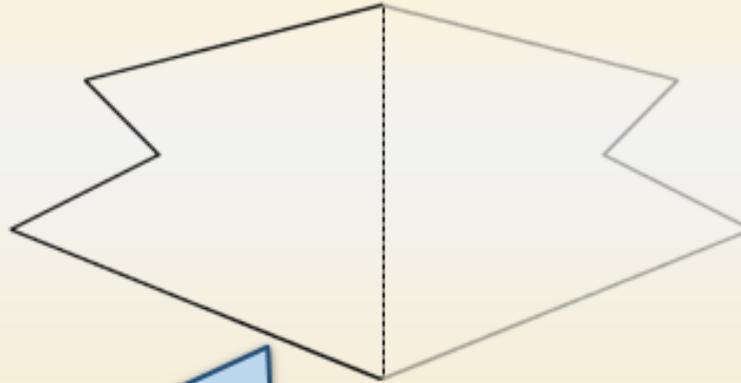
Do you think this
shape has a line of
symmetry?



A line of symmetry is
the line along which,
if we fold the shape,
both halves will be
identical.

Learning Reminders

Complete shapes with a line of symmetry.

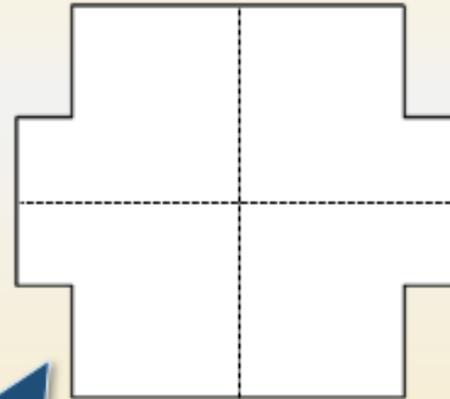


This is one half of an irregular octagon. When complete, this octagon is symmetrical. Let's sketch what the other half of this shape will look like.

Try to imagine the complete shape folded along this line. The two halves should match.

Learning Reminders

Complete shapes with a line of symmetry.



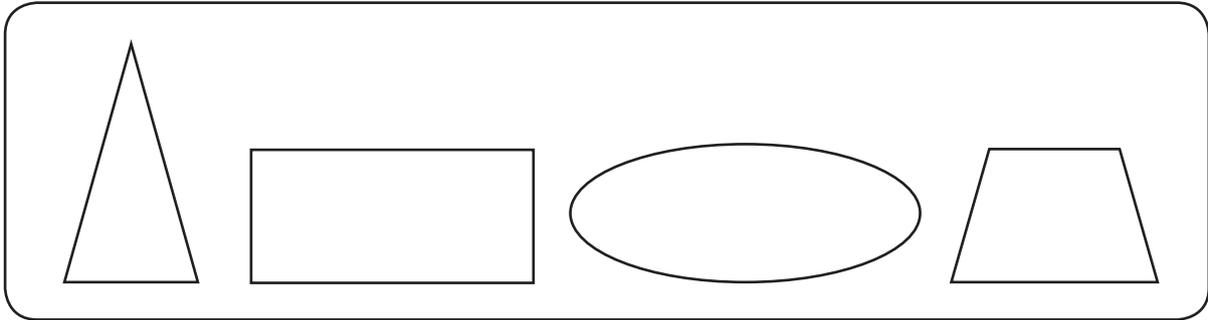
How many lines of symmetry does this shape have?

Two

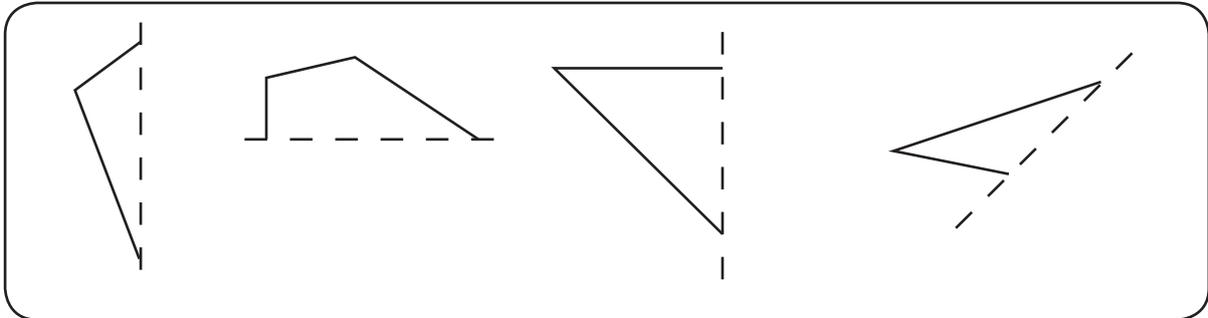
Practice Sheet Mild

Symmetrical shapes

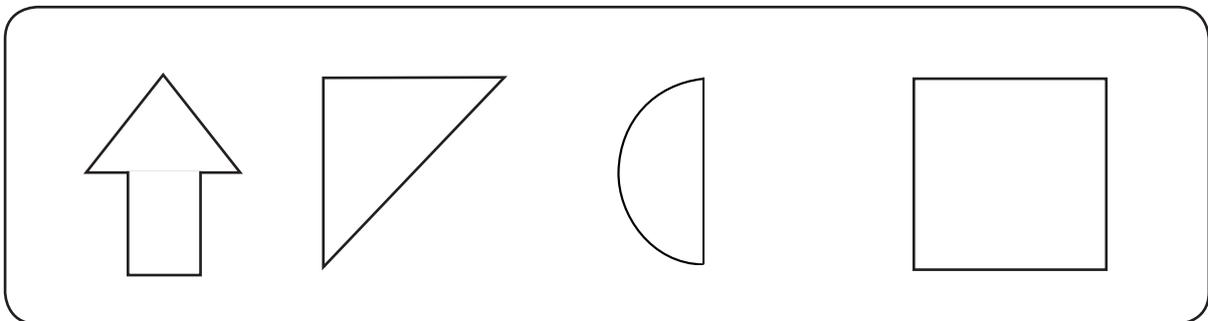
1. Draw all the lines of symmetry on these shapes.



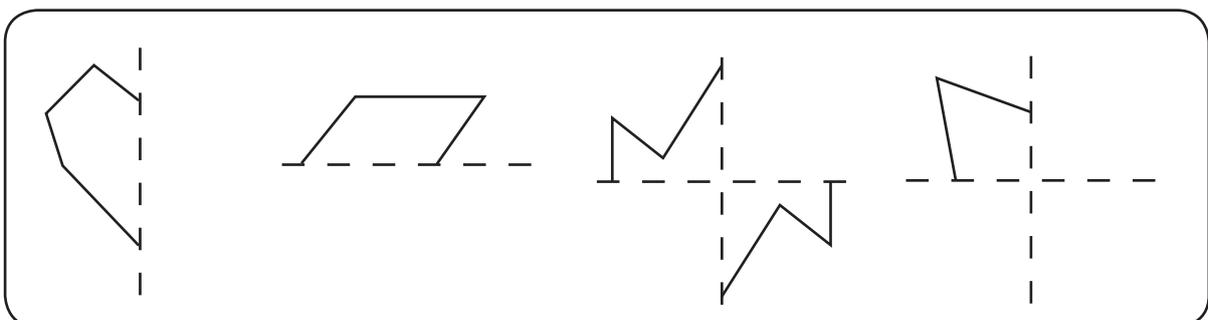
2. Complete these shapes to make them symmetrical across the dotted lines of symmetry.



3. Draw all the lines of symmetry on these shapes.



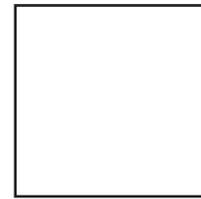
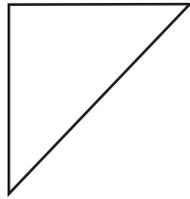
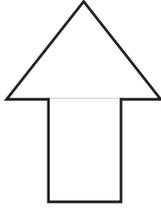
4. Complete these shapes to make them symmetrical.



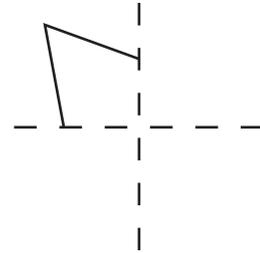
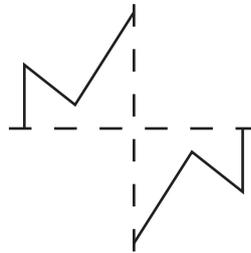
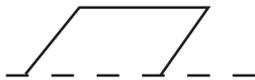
Practice Sheet Hot

Symmetrical shapes

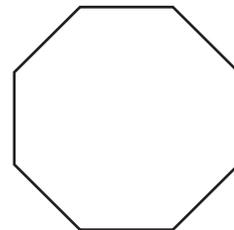
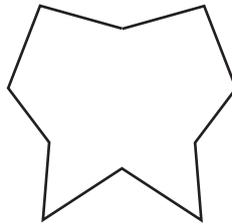
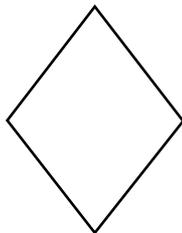
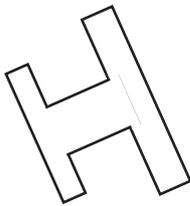
1. Draw all the lines of symmetry on these shapes.



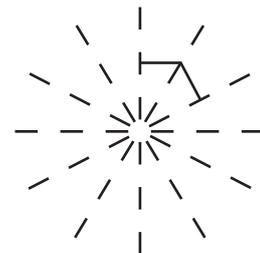
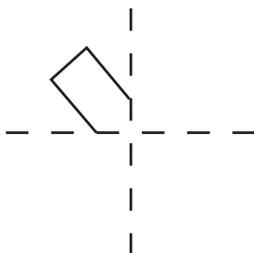
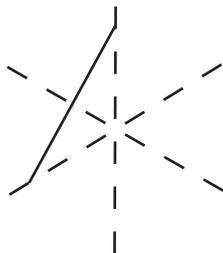
2. Complete these shapes to make them symmetrical across the dotted lines of symmetry.



3. Draw all the lines of symmetry on these shapes.

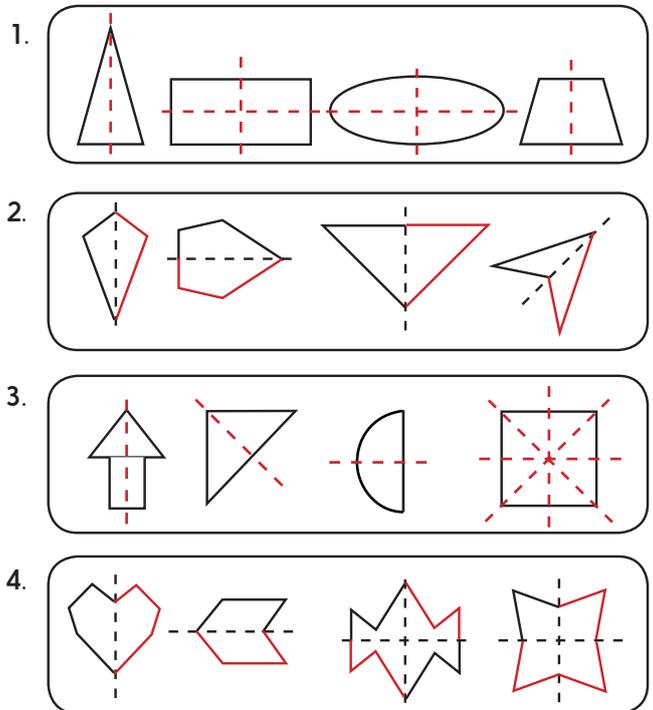


4. Complete these shapes to make them symmetrical.

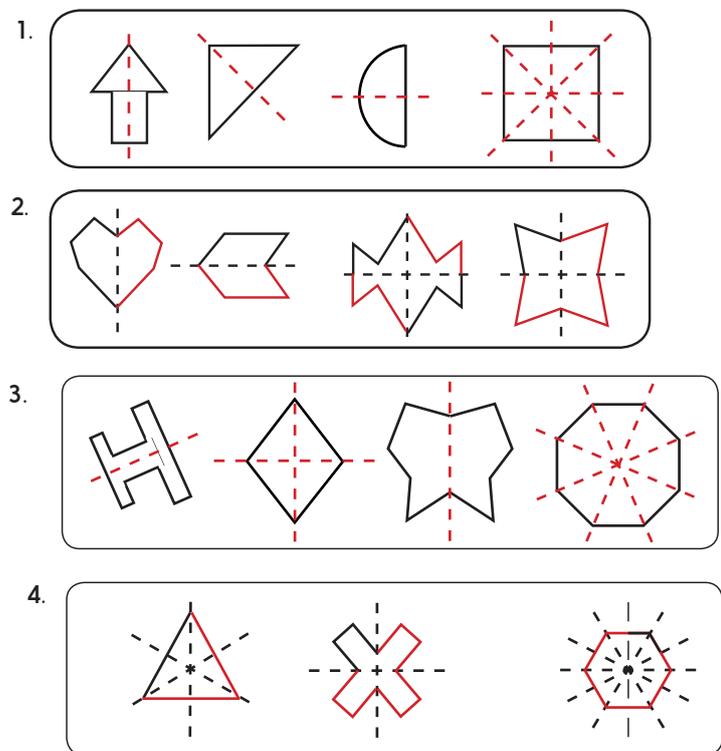


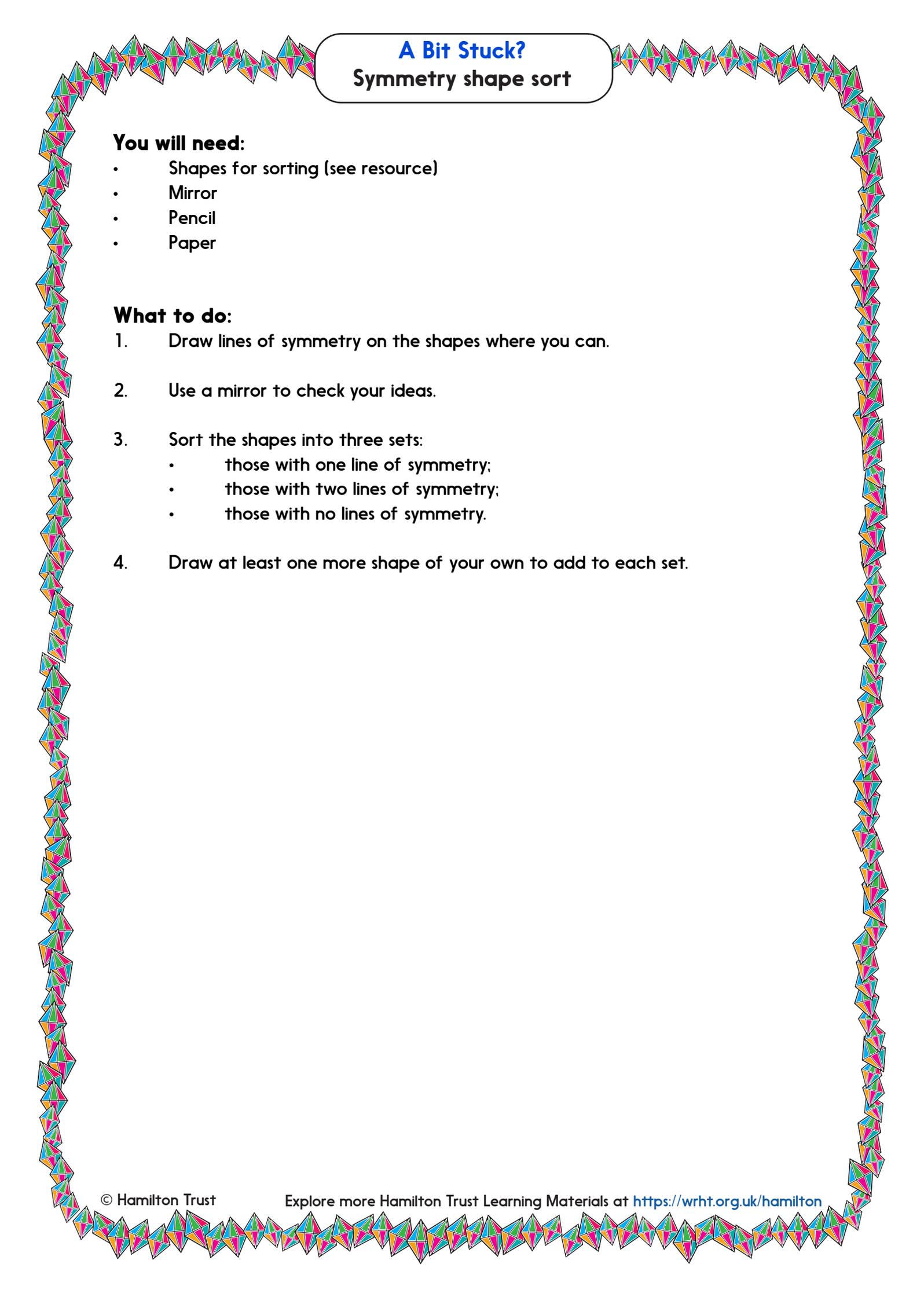
Practice Sheets Answers

Symmetrical shapes (mild)



Symmetrical shapes (hot)





A Bit Stuck?

Symmetry shape sort

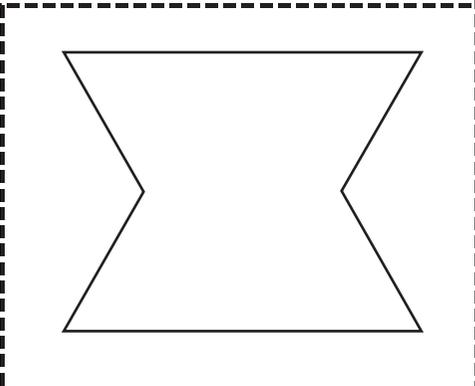
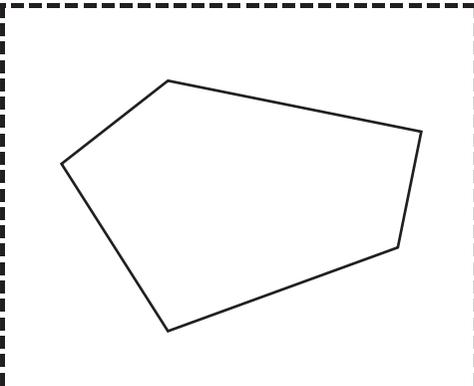
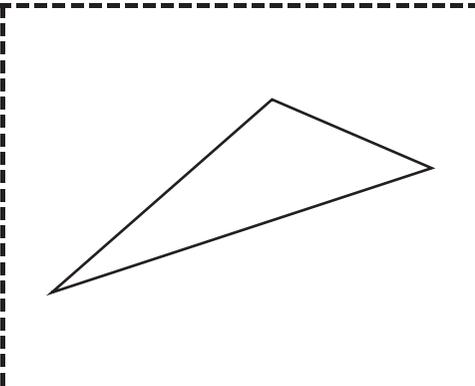
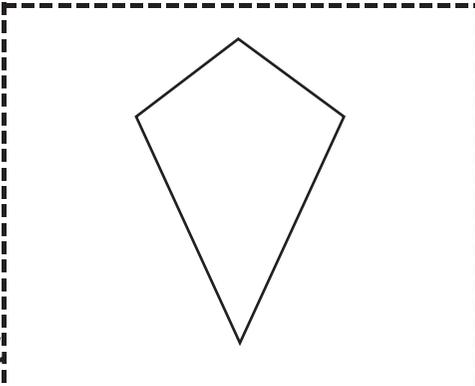
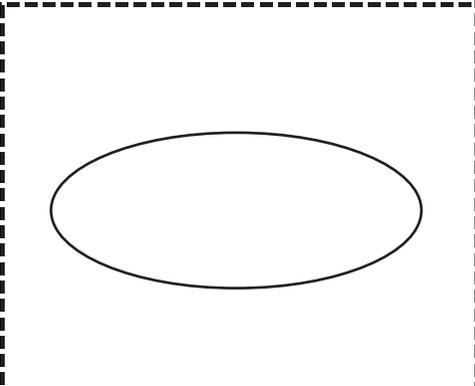
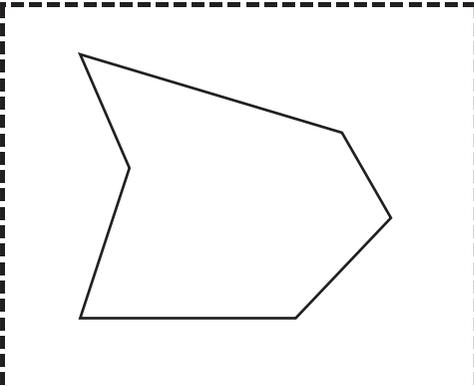
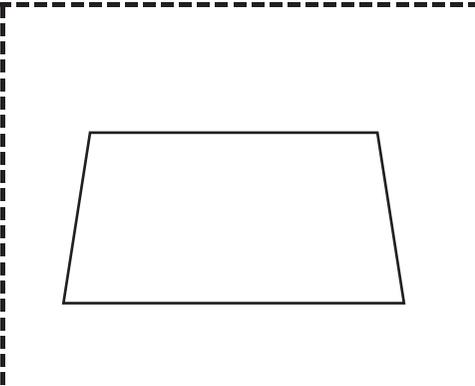
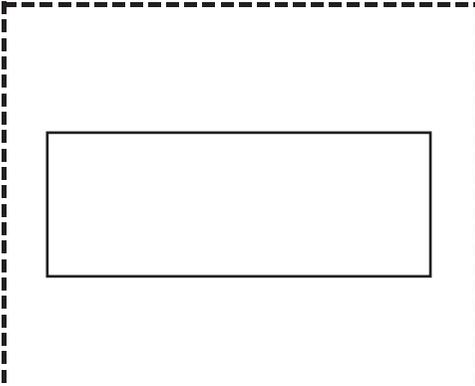
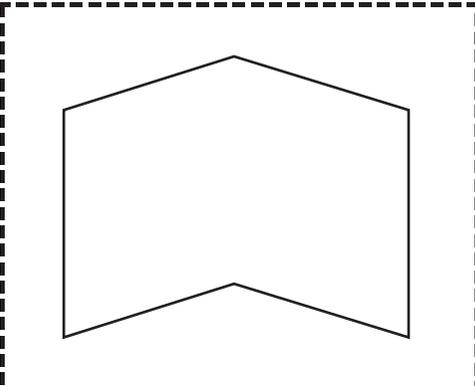
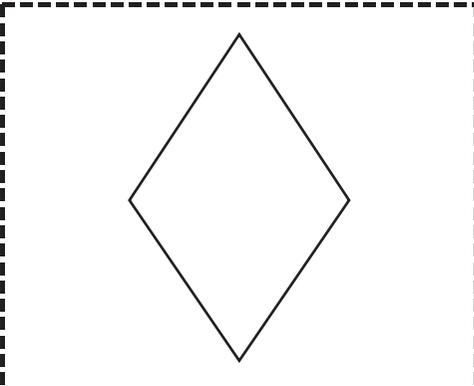
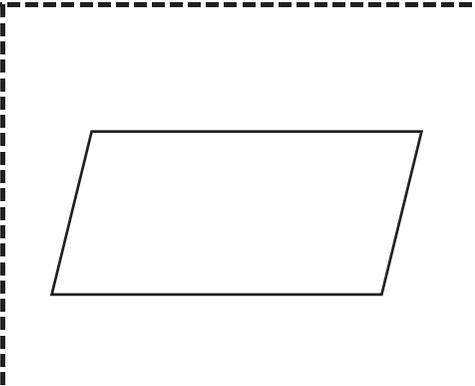
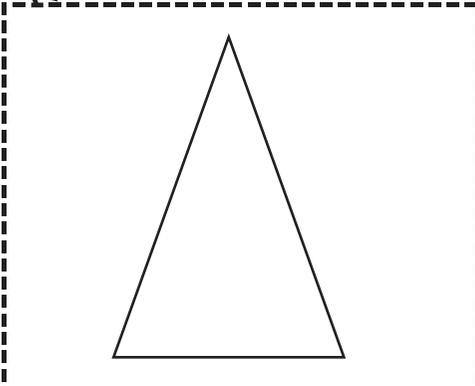
You will need:

- Shapes for sorting (see resource)
- Mirror
- Pencil
- Paper

What to do:

1. Draw lines of symmetry on the shapes where you can.
2. Use a mirror to check your ideas.
3. Sort the shapes into three sets:
 - those with one line of symmetry;
 - those with two lines of symmetry;
 - those with no lines of symmetry.
4. Draw at least one more shape of your own to add to each set.

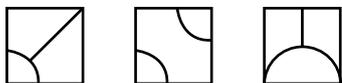
A Bit Stuck? Shapes resource



Investigation

Tremendous tiles

1. Look at the tiles below.



2. Pick your favourite and cut it out.

3. Create a pattern using your tile on a 4 x 4 square. Draw your tile pattern in each individual square.

4. Use it either as it is, or rotated through 90, 180 or 270 degrees, e.g.



5. Create a pattern on the large square with one line of symmetry, then a pattern with two lines of symmetry.

If you rotate your tile through 270 degrees, what do you notice about the result in relation to its original position?

How many patterns can you find with two lines of symmetry?

