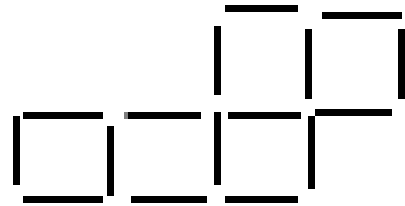


Matchstick Shape

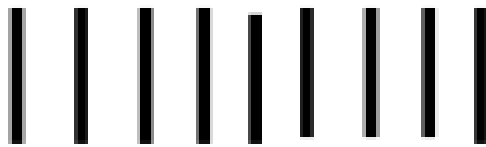
1. Move 3 matchsticks to change 3 equilateral triangles into 4 equilateral triangles.



2. Move 2 matchsticks to change 5 identical squares into 4 identical squares.



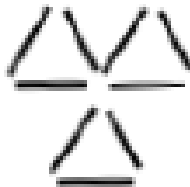
3. Make 5 triangles from 9 matchsticks.



4. Move 1 matchstick to make this calculation, written in Roman numerals, correct.

$$III = IX - I$$

5. Move 3 matchsticks to make 3 rhombuses.



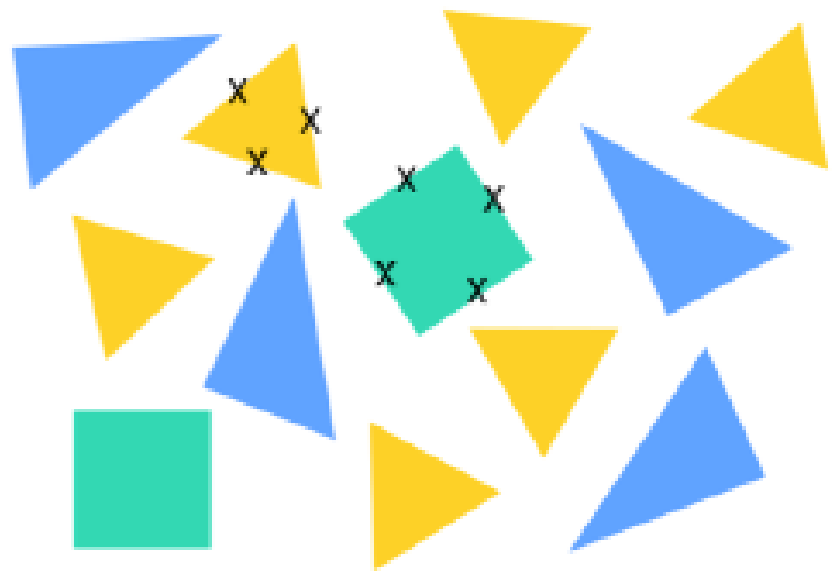
6. Add 5 matchsticks to create 8 triangles.



Chocolate Shapes

Holly cannot eat any chocolates from her favourite selection box because she has given up chocolate for Lent. Instead of eating them, she decides to do an investigation.

These are the shapes of the chocolates she has in her box (sides marked x are the same length) and each colour represents a different shape.



Different shapes can be made by joining chocolates together.

1. How many different ways can you use the chocolates to make a rectangle?
2. Can you make a rhombus?
3. Can you make a parallelogram?
4. Can you make a regular hexagon?
5. How many different triangles can you make?

Islamic Art

Look at these Islamic patterns.



- 1 Discuss with a partner which 2d shapes you can see. Are they regular or irregular? What are their properties?

Ready for a Challenge?



- 1 What's the same? What's different?