1) Circle any scalene triangles.
Tick any right-angled triangles.

2) Name the type of triangle you have not circled or ticked.

isosceles

1) What are the differences between these two triangles?
One has a right angle; one has one side that is longer than the others; one has one side that is shorter than the others.





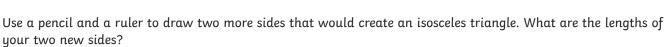
What is similar about them? **Both are isosceles triangles.**

- 2) Tick the statements that are true:
 - ightharpoonup A scalene triangle never has equal length sides.
 - An isosceles triangle can never have a right angle.
 - An isosceles triangle has three equal angles.
 - An equilateral triangle has three equal length sides.

Choose one of your true statements and prove it! *Multiple answers possible*.

1) Here is a 4cm line:





Multiple answers possible. Ensure that children's triangles have two equal sides and angles to within a reasonable degree of accuracy.

Without drawing two new sides, write the lengths of the two new sides needed to make an equilateral triangle. **4cm and 4cm**

2) Investigate:

How many different isosceles triangles can you make where the lengths of the sides are whole numbers (not decimals) that total 12cm? Draw or make your triangles to prove it.

Only one triangle can be made, with one 2cm side and two equal sides of 5cm.

3) The longest side of a triangle must be less than the other two sides added together. Investigate if this is always true. True, the longest side of a triangle is always shorter than the other two sides added together.



