

Mathematics

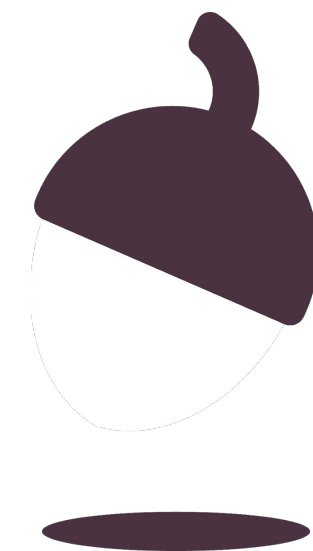
# Constructions, congruence, and loci

## Congruence and triangles 2

Independent Task

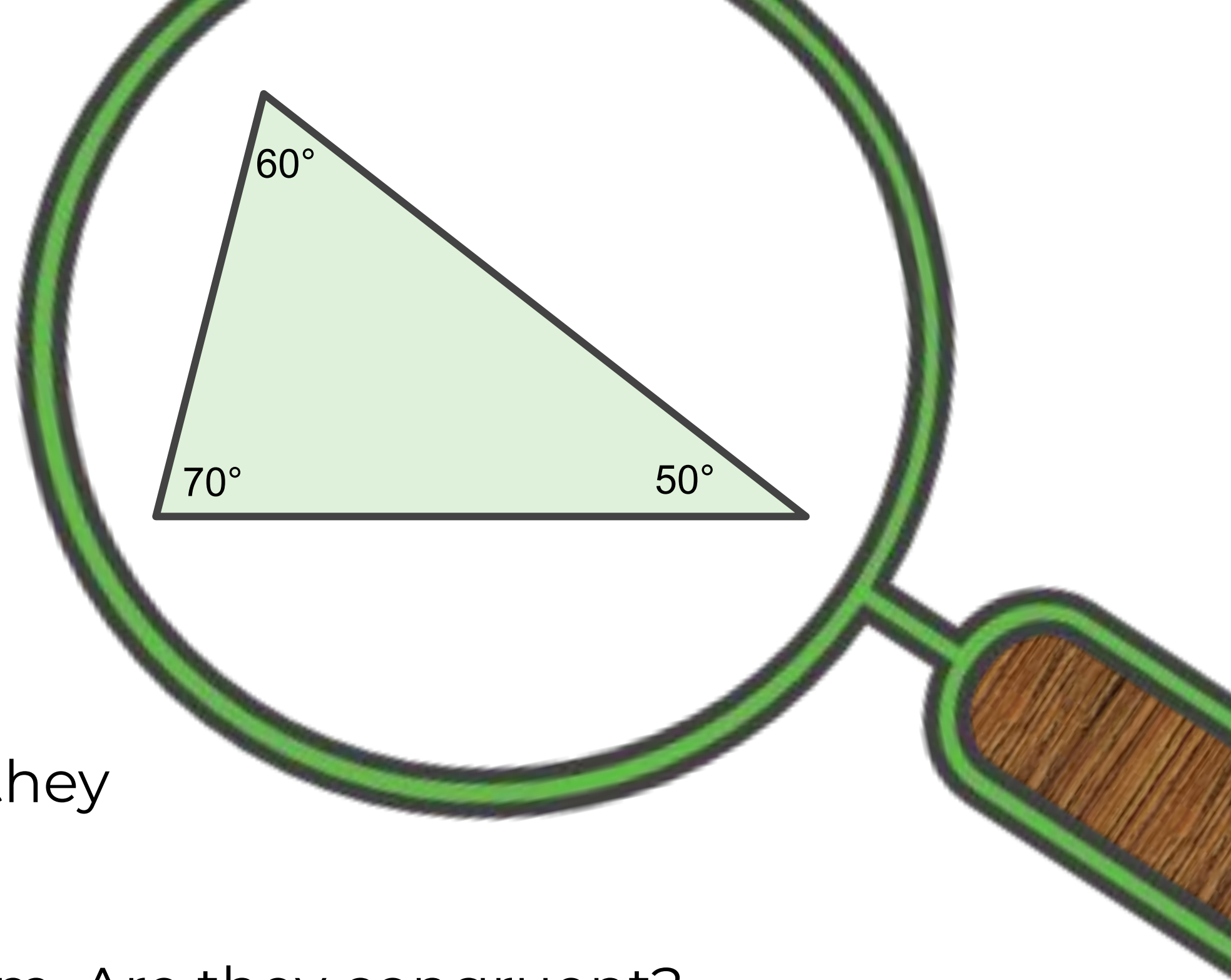
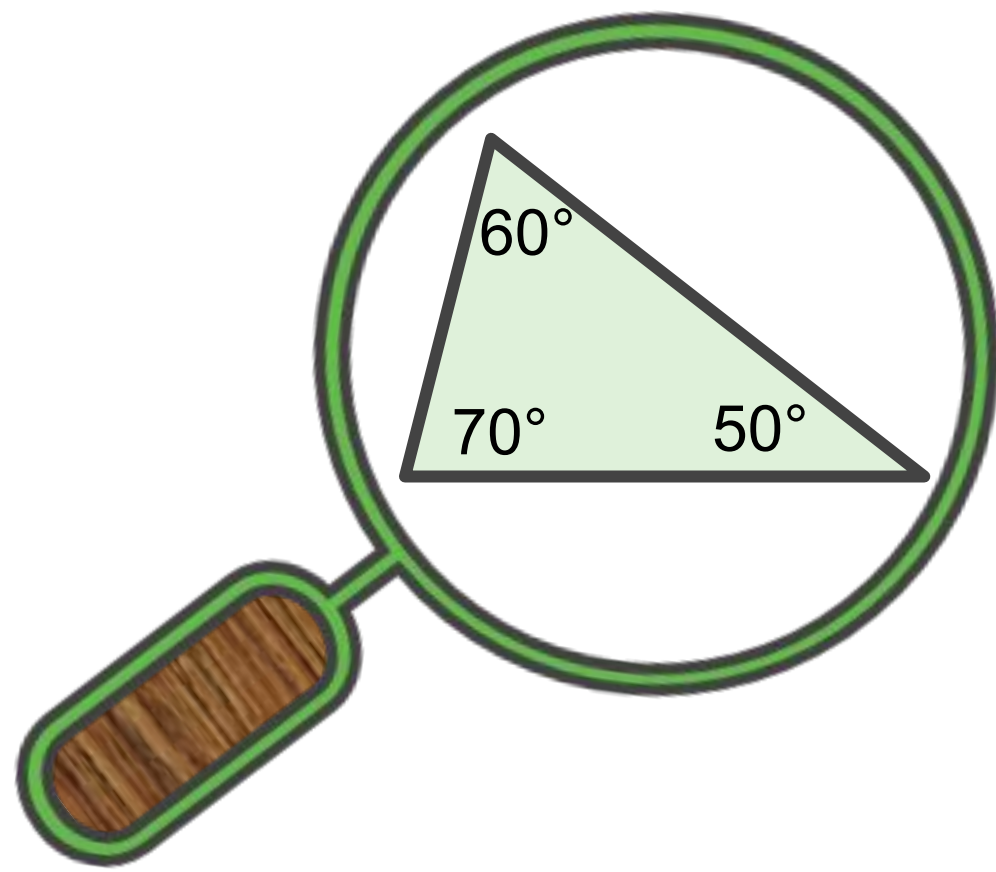
Downloadable Resource

Ms Jones



**OAK**  
NATIONAL  
ACADEMY

## Try this



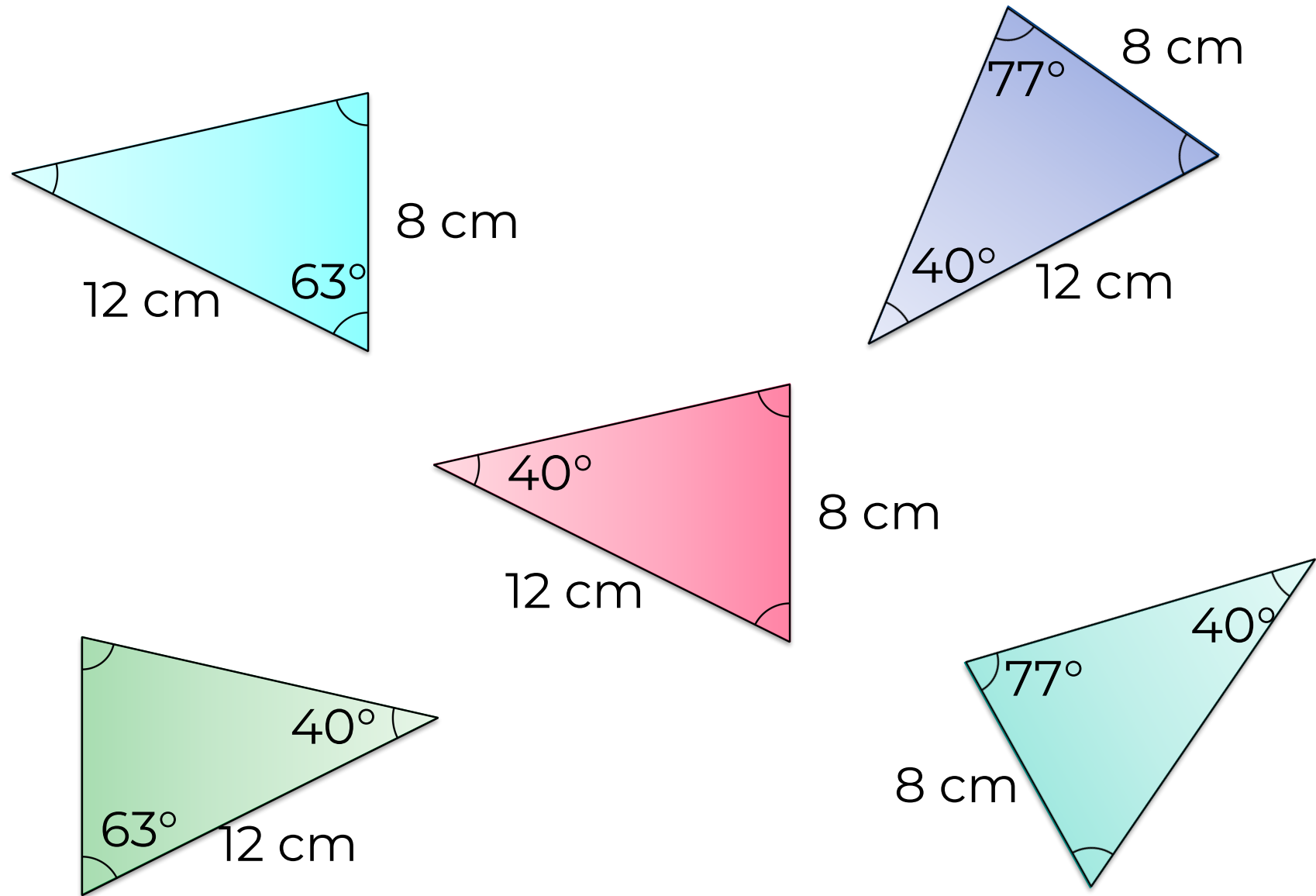
These two triangles have the same angles, but we don't know how big they are...

If they each have a side length of 8cm. Are they congruent?  
Construct an example and non-example...



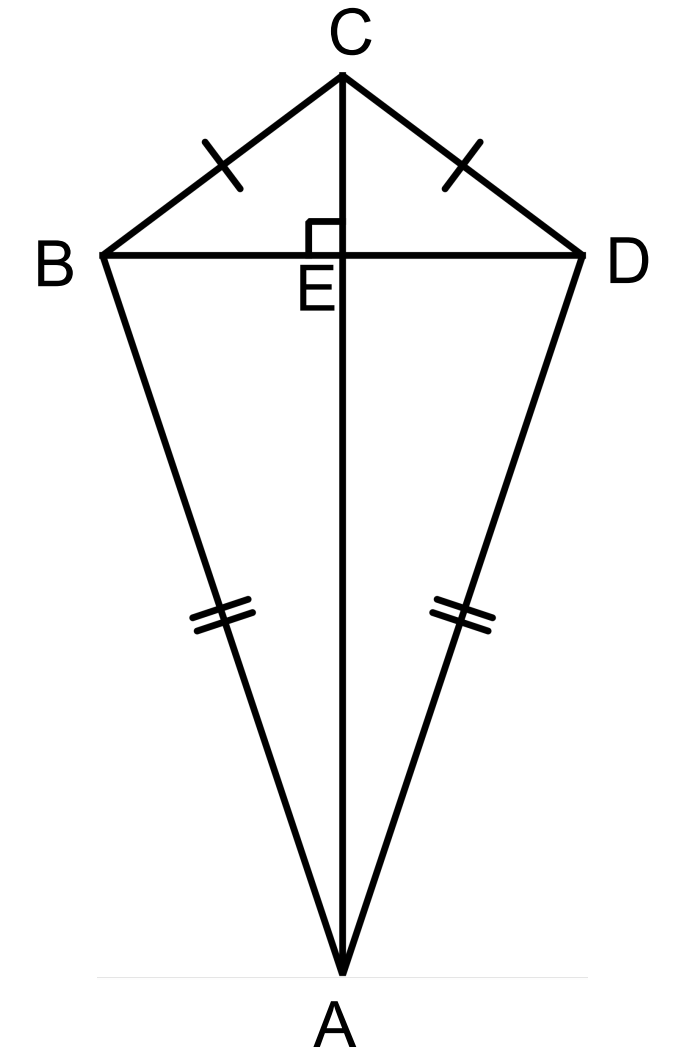
# Independent task

1. Identify which of the following triangles are congruent:



2. ABCD is a kite. The lines AC and BD meet at E. Angle AEB =  $90^\circ$ .  $AB = AD$  and  $CB = CD$ .

Identify and write down three pairs of congruent triangles.



# Explore

How many different triangles can you draw with these features:

- 1 An angle of  $30^\circ$ , a side of 5cm and a side of 3cm
- 2 An angle of  $30^\circ$ , a side of 5cm and a side of 2cm
- 3 An angle of  $30^\circ$ , a side of 5cm and a side of 7cm

Try some other lengths, what do you notice?

