# Properties of rectangles

Use the properties of rectangles to find missing lengths and angles

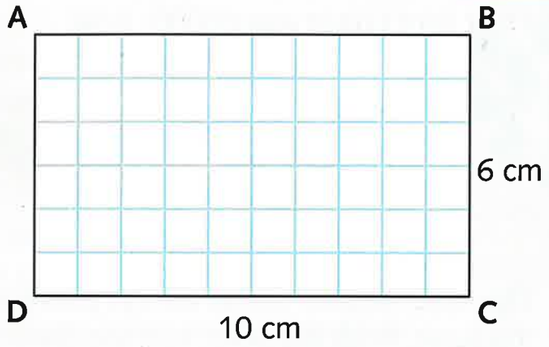
**You will need:**
- 1 cm squared paper
- ruler

1 Copy rectangle ABCD onto 1 cm squared paper.
Mark the equal sides and all the equal angles.

2 Copy and complete.

a Side AB and side ____ are both 10 cm long.

b Rectangle ABCD has ____ right angles.




**You will need:**
- 1 cm squared paper
- ruler

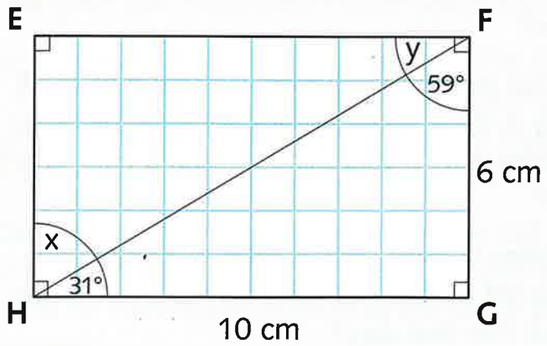
1 Copy rectangle EFGH onto 1 cm squared paper.

a Mark the equal sides and all the equal angles.

b Rule a line to join F to H, as shown below.

c Mark angle FHG = 31° and angle HFG = 59°.

d Calculate and fill in the sizes of the angles marked x and y.

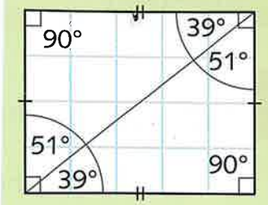



2 Copy each rectangle onto 1 cm squared paper.

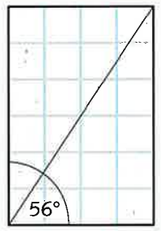
a Without measuring, complete each rectangle filling in the sizes of all the angles.

b Mark the equal sides.

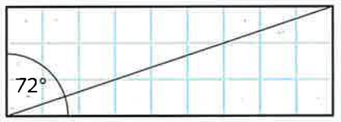
**Example**



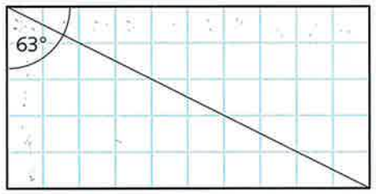

A



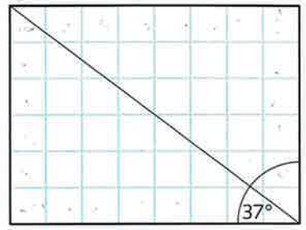

B




C




D




Challenge 3

Each of the two diagrams below show two sides of a rectangle.

**You will need:**
- 1 cm squared paper
- ruler
- protractor

a Copy each of the two diagrams onto 1 cm squared paper.

b Work out the position of the vertices H and S and complete the rectangles EFGH and PQRS.

c Measure the lengths of the sides of each rectangle to the nearest millimetre. Write these on the diagrams and mark the angles.