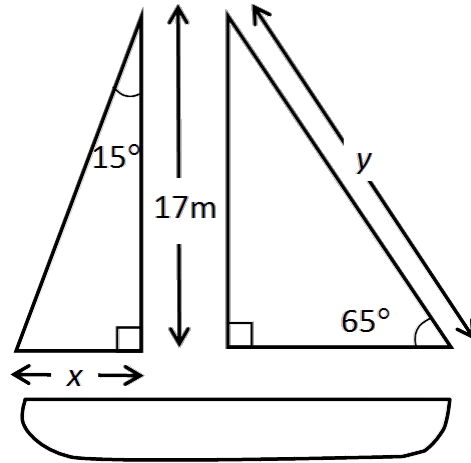


# Sails for the yacht

This task is about using trigonometry to calculate lengths of a triangle.



[Not drawn to scale]

Maia is drawing a pattern so she can make two sails for her yacht. She calculates the lengths of sides  $x$  and  $y$  using the measurements above and trigonometry.

a) Calculate the length of side  $x$ . Use the space provided to show your working.

Length of side  $x =$  \_\_\_\_\_ metres.

b) i) Use trigonometry to show **two different** ways Maia could find the length of side  $y$ . Use the numbers in the diagram above.

1:	2:
----	----

ii) Use one of your methods to calculate the length of side  $y$ .

Length of side  $y =$  \_\_\_\_\_ metres.