

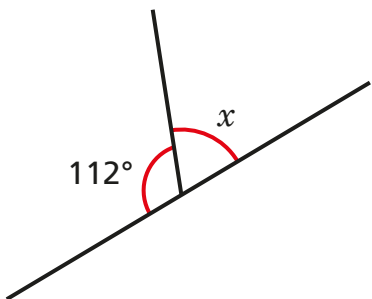
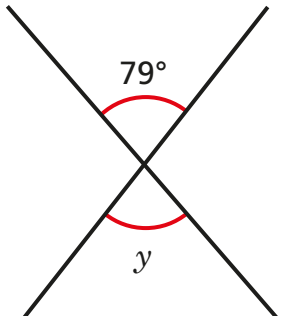
Understand and use basic angle rules and notation

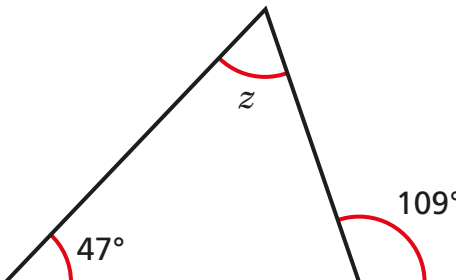
1 Complete the angle rules.

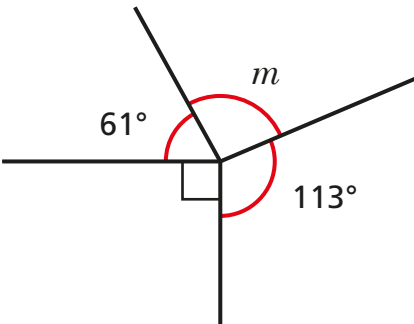
- a) Angles on a straight line _____
- b) Angles around a point _____
- c) Vertically opposite angles _____
- d) Angles in a triangle _____
- e) Angles in a quadrilateral _____

2 Work out the sizes of the unknown angles.

Give reasons for your answers.

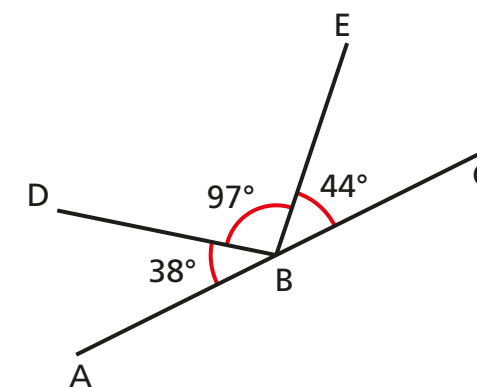
- a)  $x = \boxed{}$ because _____
- b)  $y = \boxed{}$ because _____

- c)  $z = \boxed{}$ because _____

- d)  $m = \boxed{}$ because _____

3 a) Write the size of the given angles.

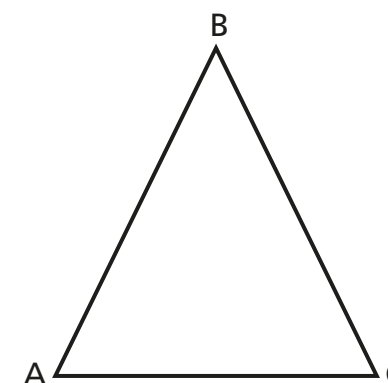
ABD	<input type="text"/>
EBC	<input type="text"/>
DBE	<input type="text"/>



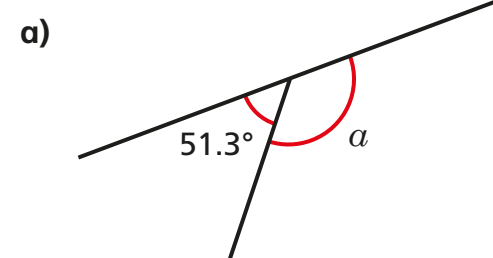
- b) Is ABC a straight line? _____
How do you know?

4 Here is a triangle.

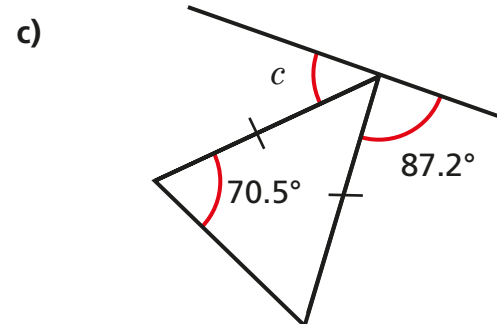
- a) $\angle BAC = 64^\circ$
Show this information on the triangle.
- b) Given that $\angle BCA = 52^\circ$,
is triangle ABC isosceles? _____
Explain your answer.



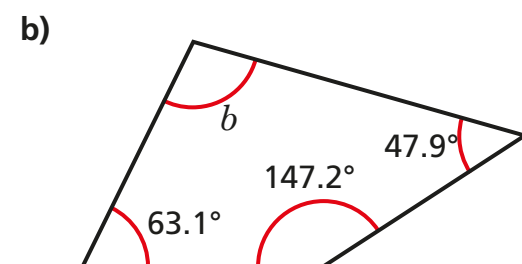
- 5 Work out the size of the unknown angles.



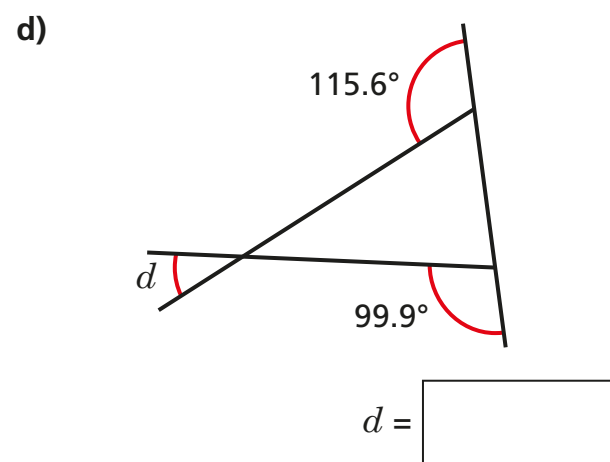
$a =$



$c =$



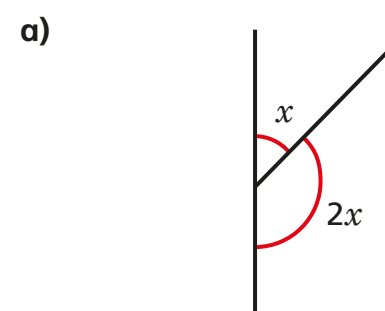
$b =$



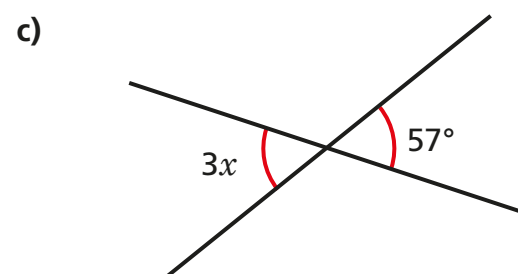
$d =$

Discuss your reasons with a partner.

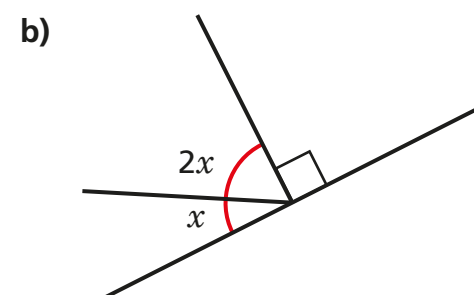
- 6 Work out the value of x .



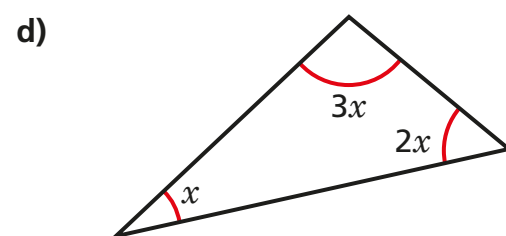
$x =$



$x =$



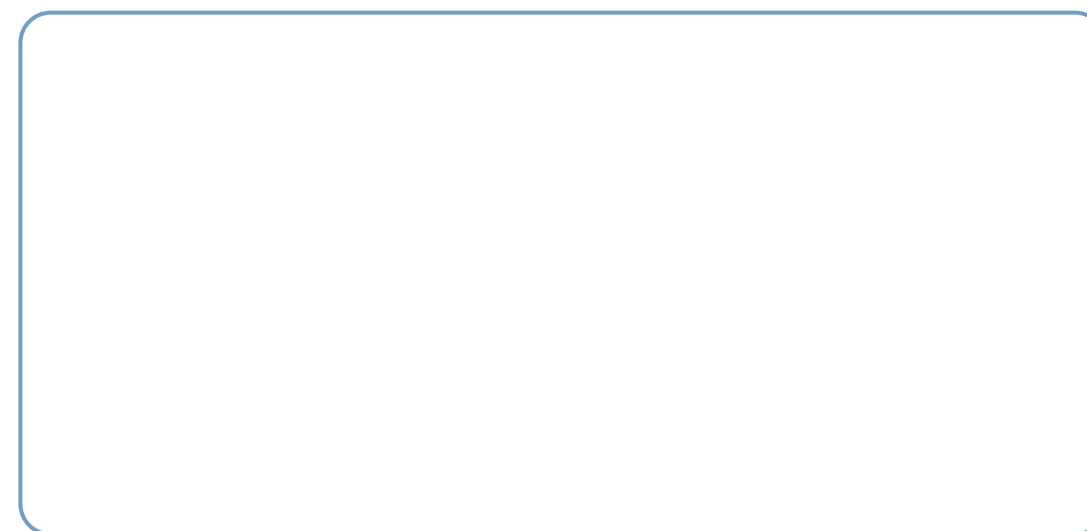
$x =$



$x =$

- 7 The angles in a triangle are in the ratio 2 : 3 : 5
Is the triangle a right-angled triangle? _____
Show your workings.

- 8 AB and CD are straight lines.
The lines AB and CD intersect at point E.
Angle CEB is 47° greater than angle AEC.
a) Draw a diagram to represent this information.



- b) Work out the size of each angle.
Give your answers using correct angle notation.

Create your own problem like this for a partner.