1

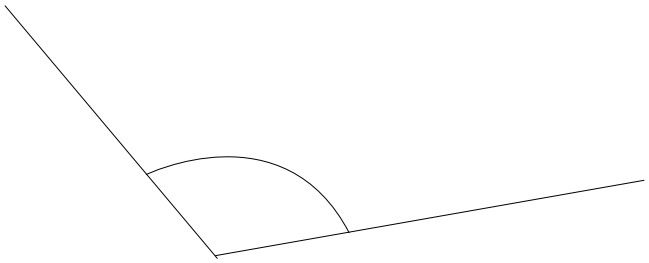
How many **degrees** does the hour hand on a clock turn between 3pm and 9pm?

180 °

1 mark

2

Measure the angle below using a protractor. Give your answer in degrees.



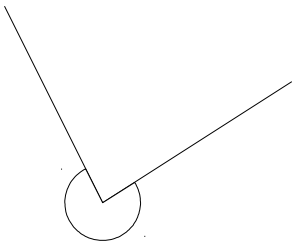
120 °

1 mark

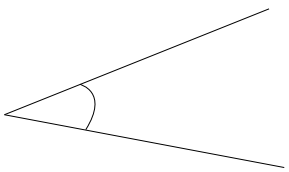
3

Acute Obtuse Reflex Right

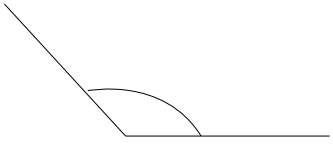
Use the words above to write the correct name for each angle.



Reflex



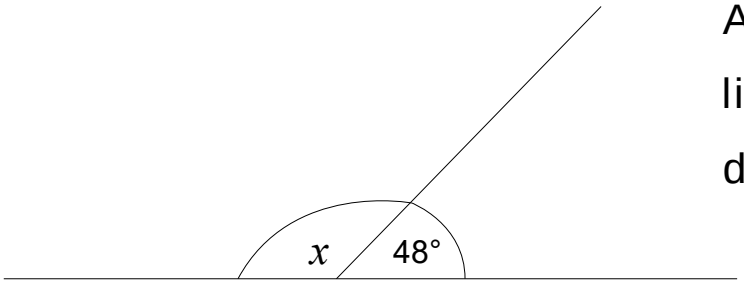
Acute



Obtuse

2 marks

4 Find the size of the missing angle in this diagram.



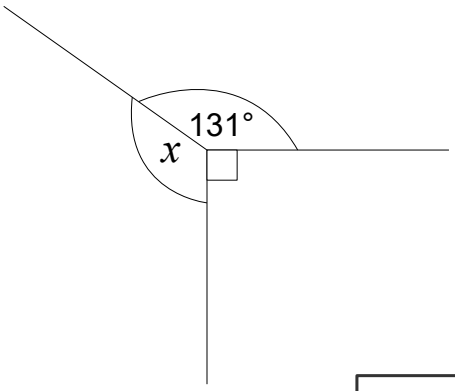
Angles on a straight line add to 180 degrees

180 - 48 = 132

$x = 132°$

1 mark

5 Find the size of the missing angle in this diagram.



Angles around a point add to 360 degrees

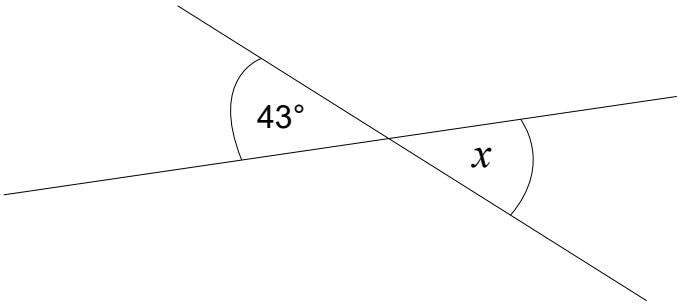
131 + 90 = 221

360 - 221 = 139

$x = 139°$

1 mark

6 Find the size of the missing angle in this diagram.

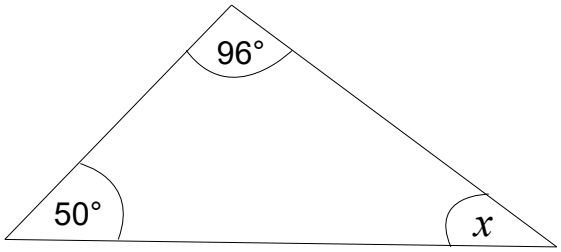


Vertically opposite angles are equal

$x = 43°$

1 mark

7 Find the size of the missing angle in this diagram.



Angles in a triangle add to 180 degrees

50 + 96 = 146

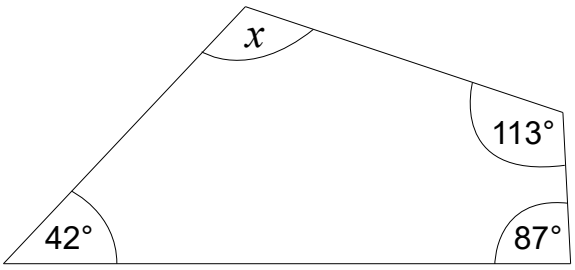
180 - 146 = 34

$x =$ 34 °

1 mark

8 Find the size of the missing angle in this diagram.

113
87
+42
242



Angles in a quadrilateral add to 360 degrees

360 - 242 = 118

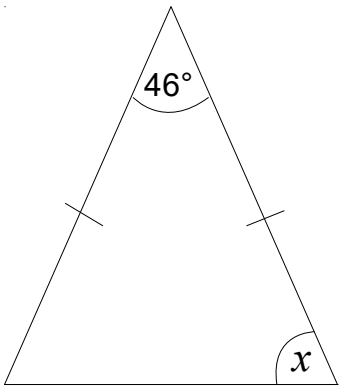
$x =$ 118 °

1 mark

9 Find the size of the missing angle in this diagram.

180 - 46 = 134

134 ÷ 2 = 67



The angles at the base of an isosceles triangle are equal

$x =$ 67 °

1 mark

10 Two angles in a triangle are 30° and 120°

Theo says, “It is an equilateral triangle”.

Explain why Theo is **not** correct.

In an equilateral triangle all the angles are they same, they are all 60 degrees.

1 mark

11 Two angles in a triangle are 50° and 70°

Harriet says, “It is an isosceles triangle”.

50 + 70 = 120

180 - 120 = 60

Explain why Harriet is **not** correct.

The third angle would be 60 degrees.

In an isosceles triangle two angles are equal.

1 mark

12 Harper says, “If you add the the size of an acute angle to the size of an obtuse angle, you always get a reflex angle”.

Explain why Harper is **not** correct.

A reflex angle is over 180 degrees.

If you add an acute angle to an obtuse angle the answer could be less than 180 degrees.

For example: 30 + 100 = 130

1 mark