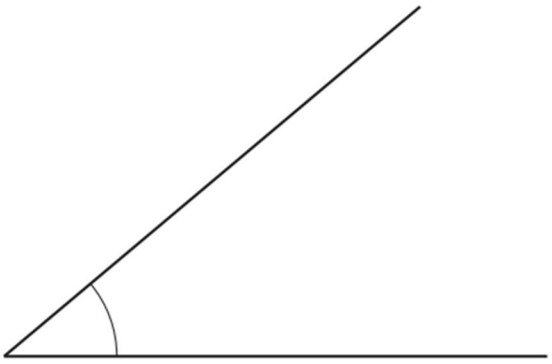
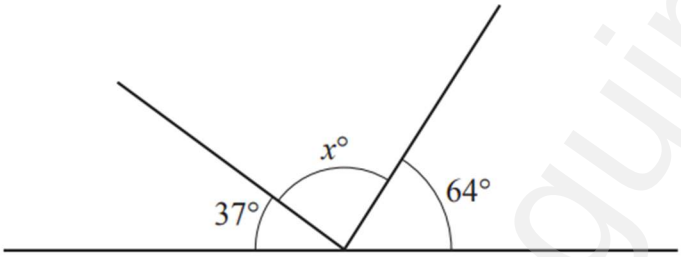
1



Measure the marked angle.

..... [1]

2

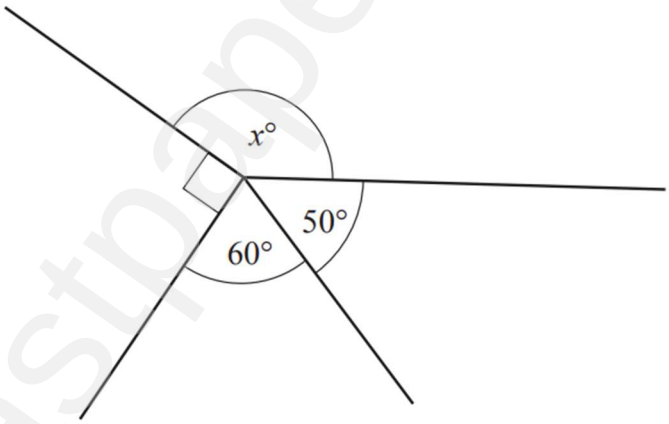


NOT TO SCALE

Find the value of x.

$x =$ ..... [1]

5



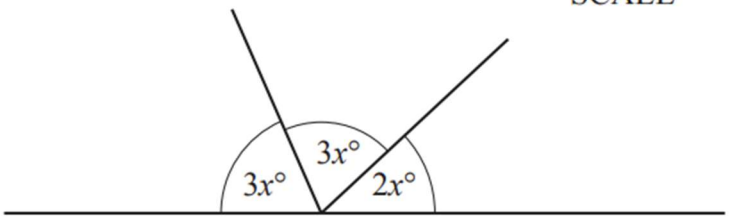
NOT TO SCALE

Find the value of x.

$x =$ ..... [1]

4

NOT TO SCALE

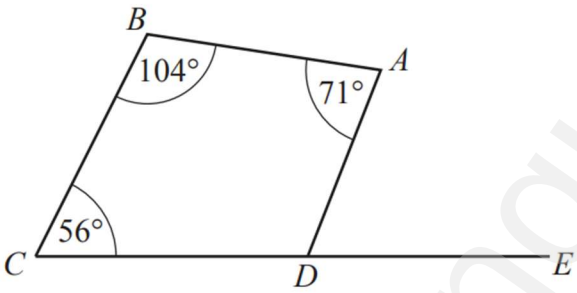


The diagram shows three angles on a straight line.

Find the value of x.

$x =$ ..... [2]

1



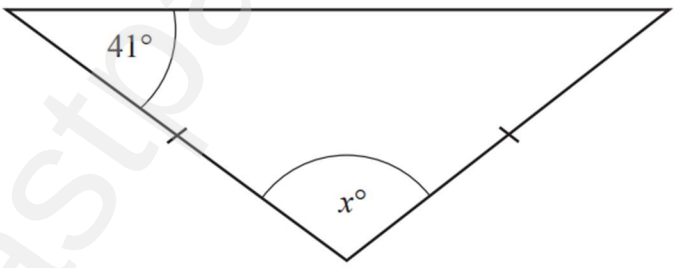
NOT TO SCALE

CDE is a straight line.

Find angle ADE.

..... [2]

1 The diagram shows an isosceles triangle.

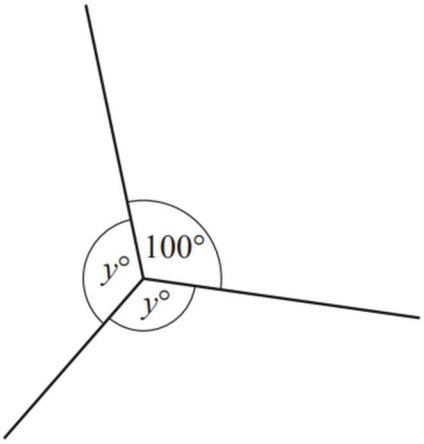


NOT TO SCALE

Find the value of x.

$x =$ ..... [2]

4

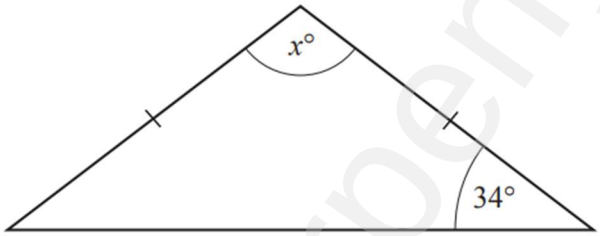


NOT TO SCALE

Find the value of y.

$y =$ ..... [2]

1



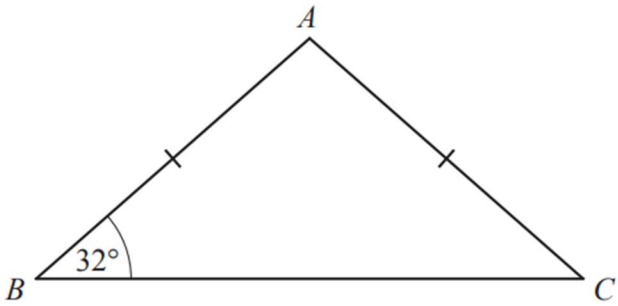
NOT TO SCALE

The diagram shows an isosceles triangle.

Find the value of x.

$x =$ ..... [2]

3



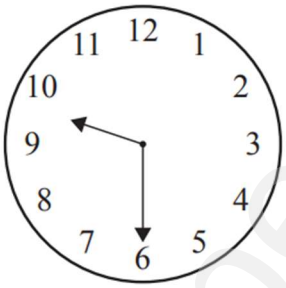
NOT TO SCALE

Triangle ABC is isosceles.
Angle $ABC = 32°$ and $AB = AC$.

Find angle BAC.

Angle BAC = ... [2]

5



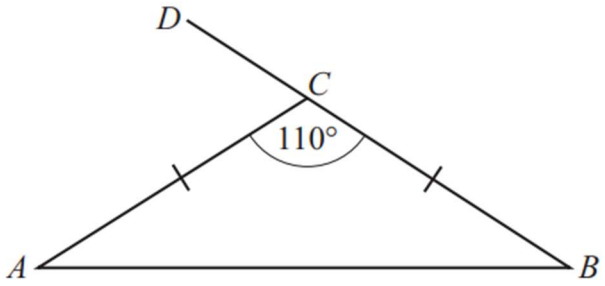
NOT TO SCALE

The clock shows the time 09 30.

Work out the obtuse angle between the hands of the clock.

..... [2]

1



NOT TO SCALE

In triangle ABC, $AC = BC$ and BCD is a straight line.

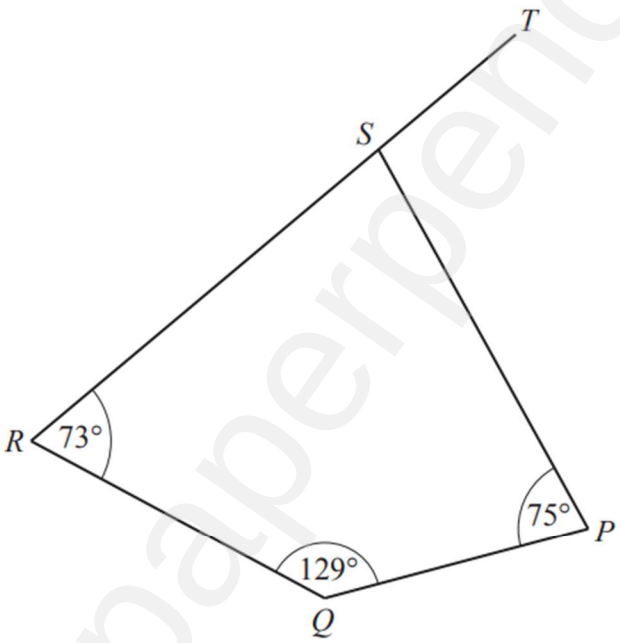
(a) Find angle ACD.

Angle ACD = ... [1]

(b) Find angle ABC.

Angle ABC = ... [1]

3



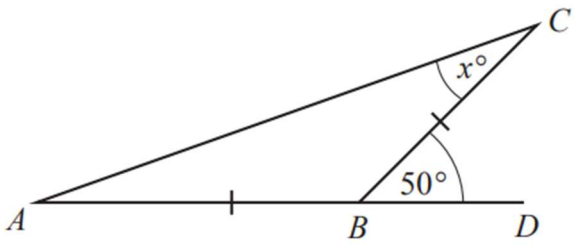
NOT TO SCALE

$PQRS$ is a quadrilateral.
RST is a straight line.

Find angle PST.

Angle PST = ... [2]

3



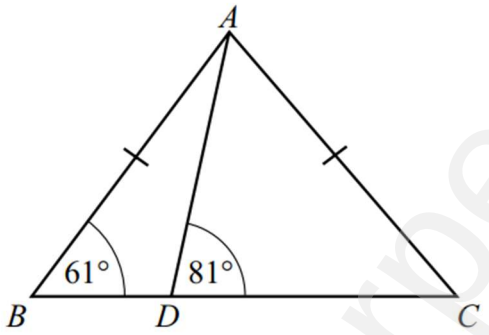
NOT TO SCALE

$AB = BC$ and ABD is a straight line.

Find the value of x.

$x =$ ..... [2]

4 The diagram shows two triangles, ABD and ADC.



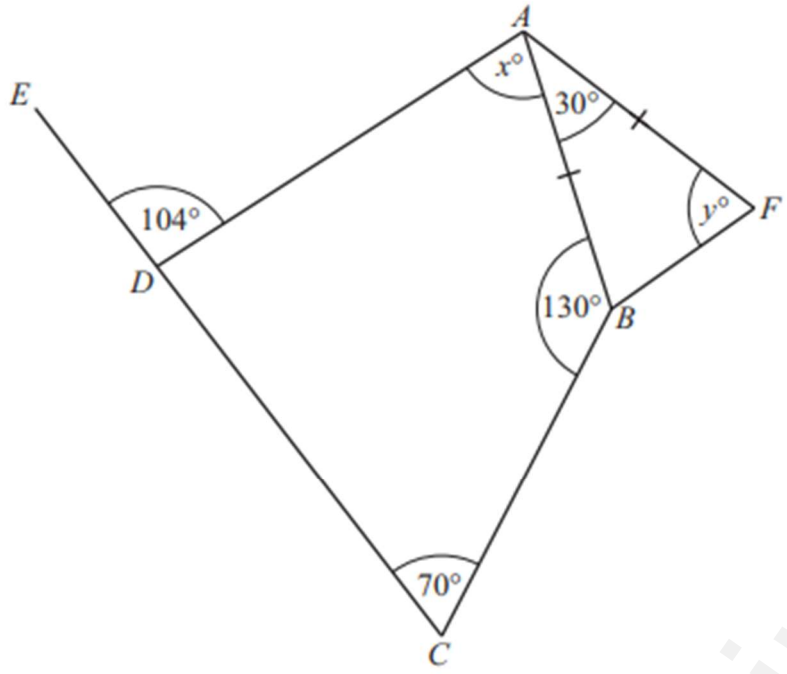
NOT TO SCALE

BDC is a straight line, $AB = AC$, angle $ABD = 61°$ and angle $ADC = 81°$.

Work out angle DAC.

Angle $DAC =$ ..... [2]

2



NOT TO SCALE

ABCD is a quadrilateral.
CDE is a straight line.
AFB is an isosceles triangle.

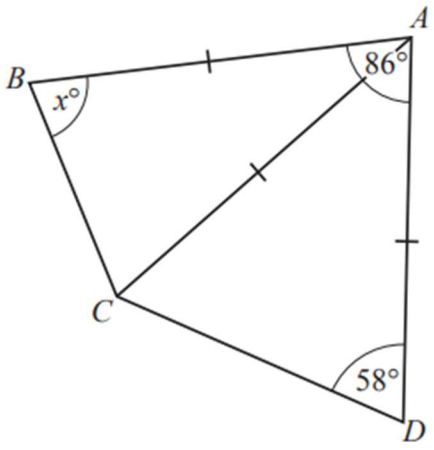
Find the value of x and the value of y.

$x =$ .....

$y =$ .....

[4]

4



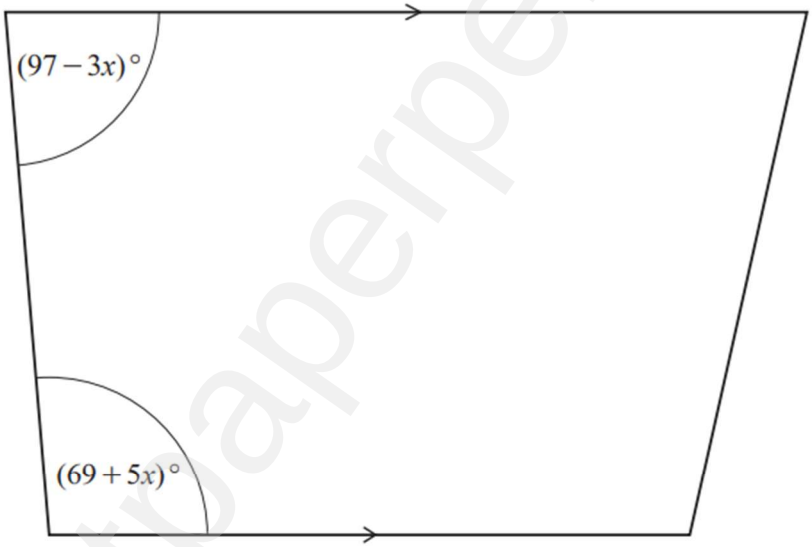
NOT TO SCALE

Triangle ABC and triangle ACD are isosceles.
Angle $DAB = 86°$ and angle $ADC = 58°$.

Find the value of x.

$x =$ ..... [3]

6 The diagram shows a trapezium.

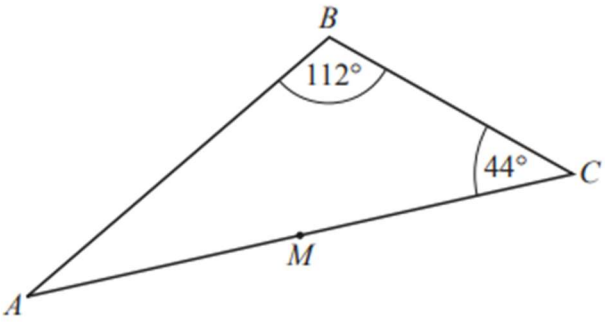


NOT TO SCALE

Work out the value of x.

$x =$ ..... [3]

5



NOT TO SCALE

The diagram shows triangle ABC.
M is the midpoint of AC.

Triangle ABC is rotated 180° about centre M.
The image and the original triangle together form a quadrilateral $ABCD$.

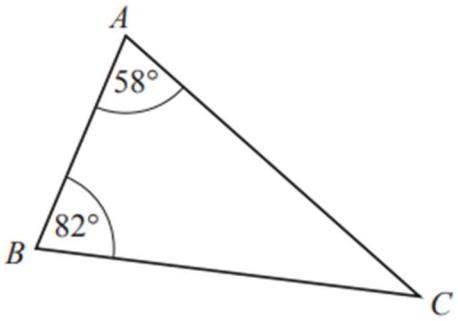
(a) Write down the mathematical name of the quadrilateral $ABCD$.

..... [1]

(b) Find angle BAD.

Angle BAD = ... [2]

6



NOT TO SCALE

The diagram shows triangle ABC.
The triangle is reflected in the line BC to give a quadrilateral $ABDC$.

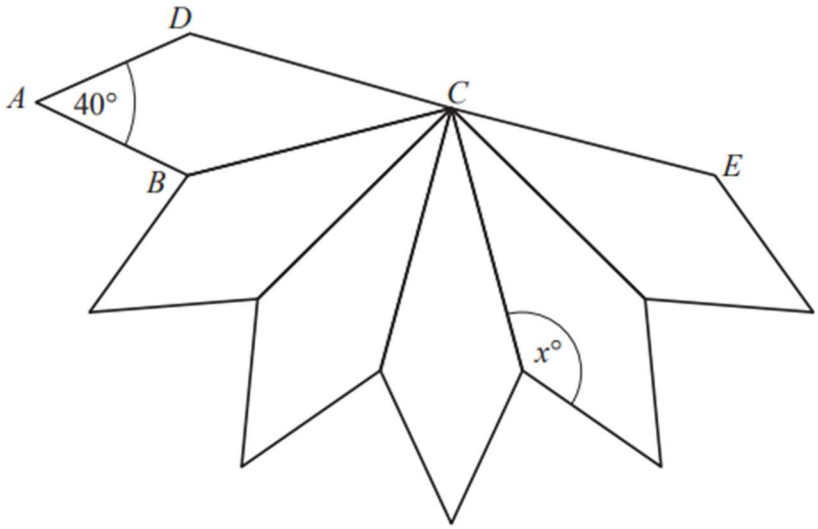
(a) Write down the mathematical name of the quadrilateral $ABDC$.

..... [1]

(b) Find angle ACD.

Angle ACD = ... [2]

6



NOT TO SCALE

The diagram shows 5 kites that are congruent to kite *ABCD*.
Each kite is joined to the next kite along one edge.
Angle *DAB* = 40° and *DCE* is a straight line.

Find the value of *x*.

x = ... [3]