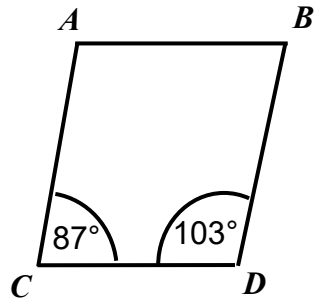


Properties of Polygons 20 minute test 2

1 Look at the diagram below.

Jamal says that ABCD is a parallelogram

Kaidee says that ABCD is not a parallelogram.



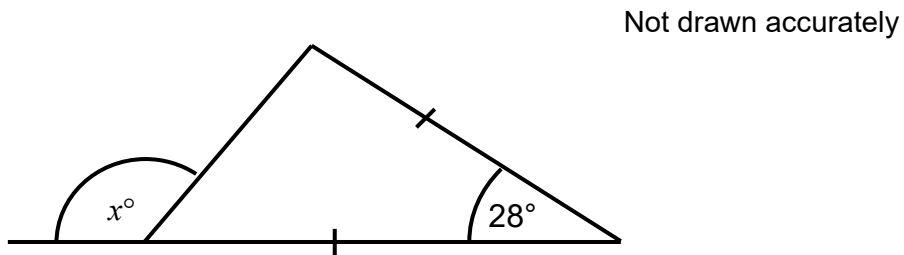
Not drawn accurately

Who is correct? Explain your reasoning.

[2 marks]

2 (a) Work out the value of x .

[3 marks]



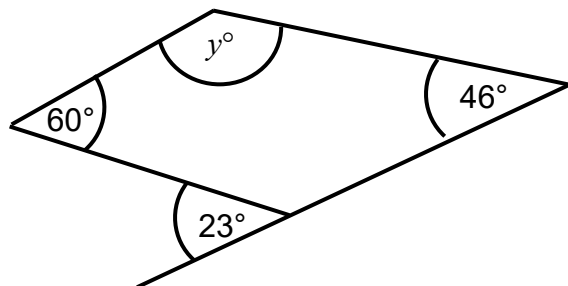
Answer _____ degrees

(b) Give full reasons for your answer.

[2 marks]

3 Work out the value of y .

[2 marks]



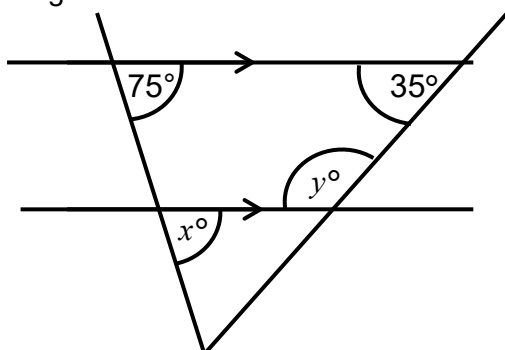
Not drawn accurately

Answer _____ degrees

(b) Give a reason for your answer.

[1 mark]

4 Look at the diagram below.



Not drawn accurately

4 (a) (i) Work out the value of x .

[1 mark]

Answer _____ degrees

4 (a) (ii) Work out the value of y .

[1 mark]

Answer _____ degrees

4 (b) Tick the correct statement.

[1 mark]

x and 75° are alternate angles

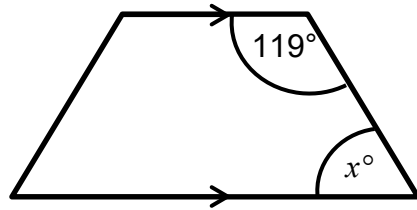
x and 75° are corresponding angles

x and 75° are opposite angles

x and 75° are supplementary angles

- 5 Look at the quadrilateral below. Work out the value of angle x .

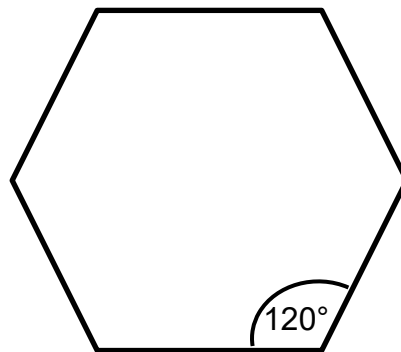
[2 marks]



Not drawn accurately

Answer _____ degrees

- 6 A regular polygon is shown below.



- 6 (a) Write down the mathematical name for this shape.

[1 mark]

Answer _____

- 6 (b) Work out the size of one exterior angle.

[2 marks]

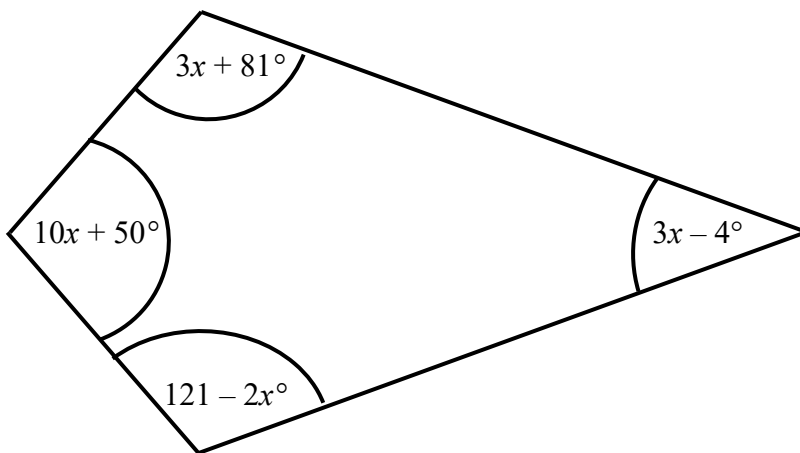
Answer _____ degrees

7 A regular polygon has 12 sides. Work out the size of **one** interior angle.

[2 marks]

Answer _____ degrees

8



Not drawn accurately

The diagram shows a kite.

Find the size of the biggest angle.

[4 marks]

Answer _____ degrees