

Year 7 Questions - Angles

Level 3-5.

1. (a) Here is a list of angles.

8° 42° 90° 97° 132° 205° 281° 333°

From the list, write down an angle which is

(i) obtuse,

Answer degrees

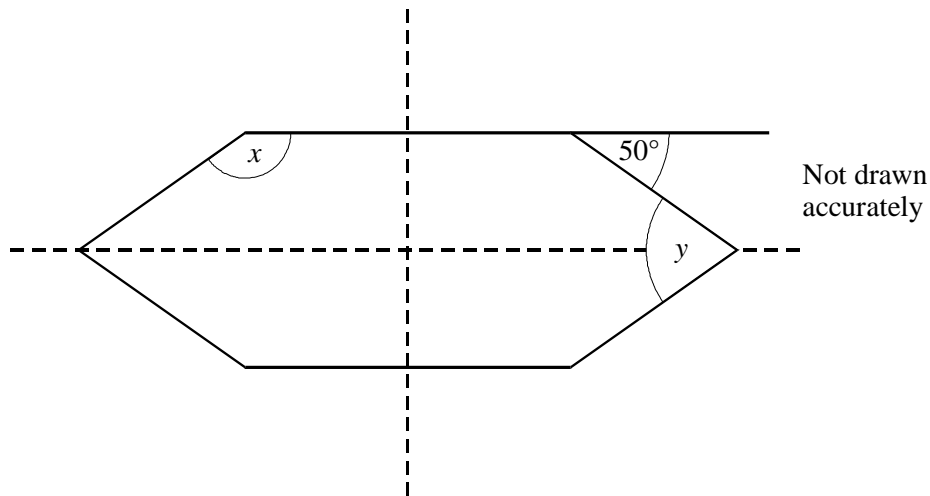
(1)

(ii) reflex.

Answer degrees

(1)

(b) The diagram shows a hexagon.
The hexagon has two lines of symmetry as shown.



(i) Work out the value of x .

.....

Answer degrees

(1)

(ii) Work out the value of y .

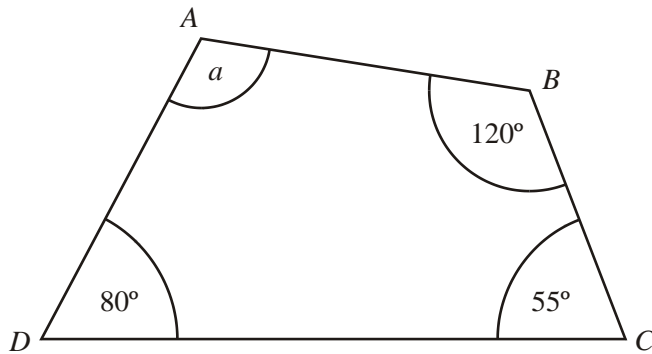
.....

Answer degrees

(2)

(Total 5 marks)

2. $ABCD$ is a quadrilateral.



Not drawn accurately

Work out the value of a .

.....

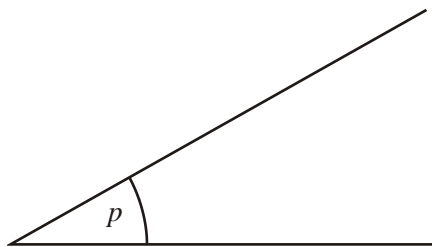
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.....

Answer degrees

(Total 2 marks)

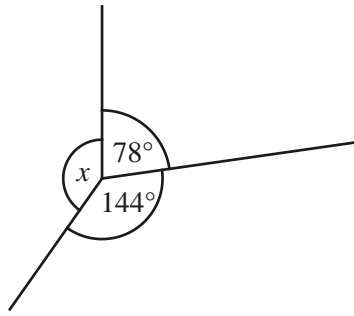
3. (a) Measure and write down the size of the angle p .
- (b) Write down what type of angle it is.



(a) Size of angle	(b) Type of angle
$p = \dots\dots\dots$ degrees

(Total 2 marks)

4. (a)



Not drawn accurately

(i) What types of angle are 78° and 144° ?

Answer 78° is

144° is

(2)

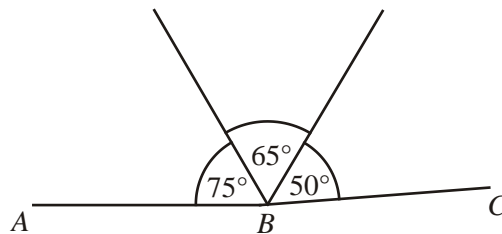
(ii) Work out the value of x .

.....

Answer $x = \dots\dots\dots$ degrees

(2)

(b)



Not drawn accurately

Jasmine says that if this diagram was drawn accurately then ABC would be a straight line.

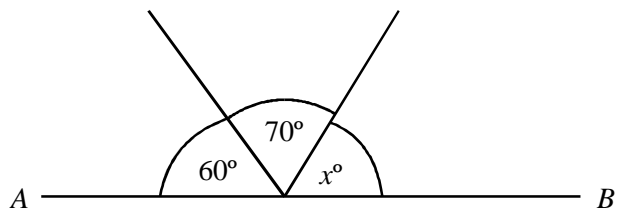
Is she right?

You **must** explain your answer.

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(2)
(Total 6 marks)

5. (a) The diagram shows 3 angles on a straight line AB .



Not drawn accurately

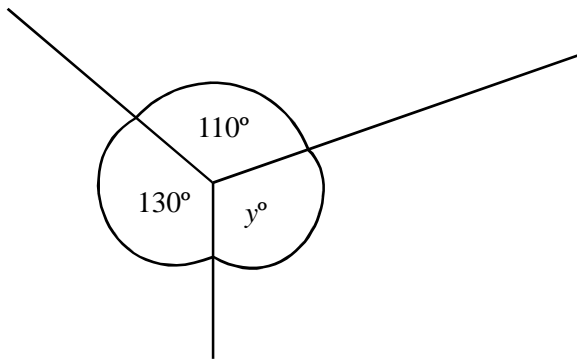
Work out the value of x .

.....

Answer degrees

(1)

- (b) The diagram shows 3 angles meeting at point.



Not drawn accurately

Work out the value of y .

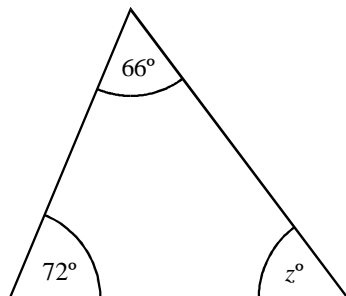
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Answer degrees

(1)

- (c)



Not drawn accurately

Work out the value of z .

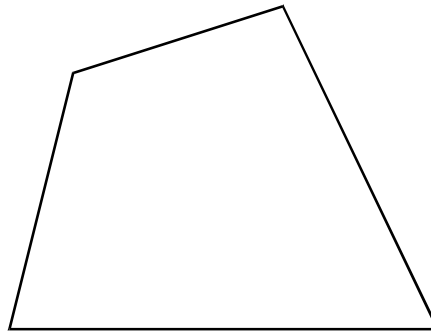
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Answer degrees

(1)

(d) Explain why the sum of the interior angles of any quadrilateral is 360° .



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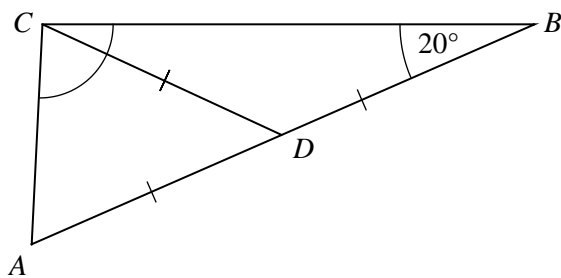
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(2)
(Total 5 marks)

6. The diagram shows a triangle ABC .
 D is a point on AB such that $DB = DA = DC$
 Angle $ABC = 20^\circ$.



Not drawn accurately

Work out the size of angle ACB .
 You **must** show your working.

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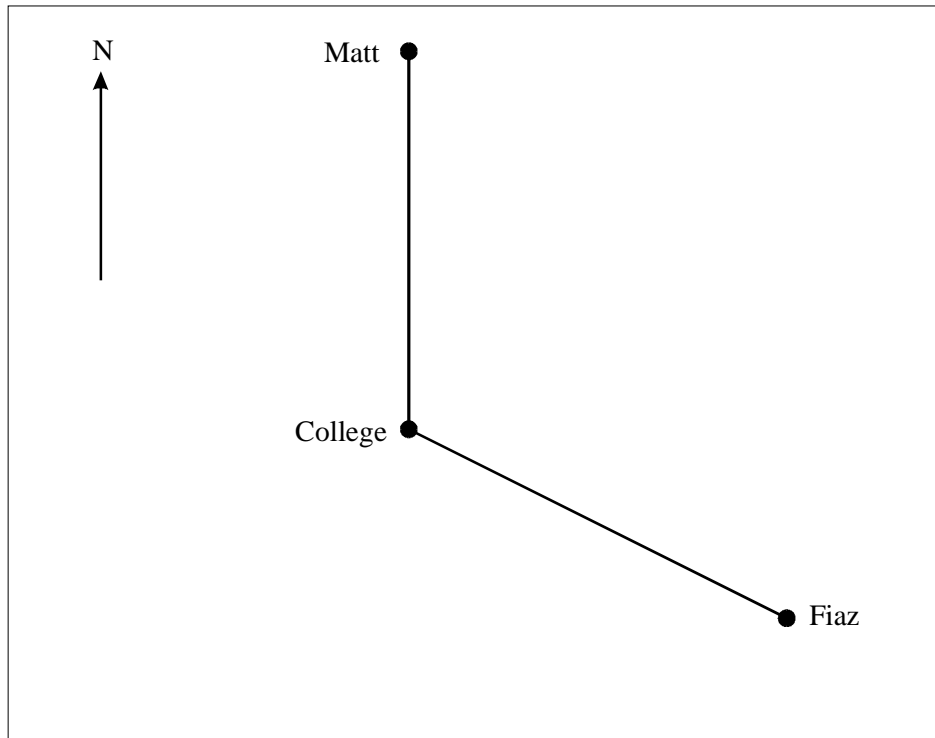
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Answer degrees
 (Total 3 marks)

7. Matt and Fiaz go to the same college.
The scale drawing shows the positions of their homes and the college.



Matt lives 2.5 kilometres due north of the college.

- (a) Measure the distance on the scale drawing from Matt's home to the college and hence complete the statement.

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Answer On the scale drawing, 1 km is represented by cm

(1)

- (b) What is the actual distance from Fiaz's home to the college?

.....

Answer km

(2)

- (c) Write down the three figure bearing of Fiaz's home from the college.

Answer degrees

(1)

(Total 4 marks)