4.11 Angles in Polygons: 10-minute Pack

EDEXCEL 1MA1 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Work out the interior angle of a regular hexagon.

(Total for Question 1 is 1 mark)

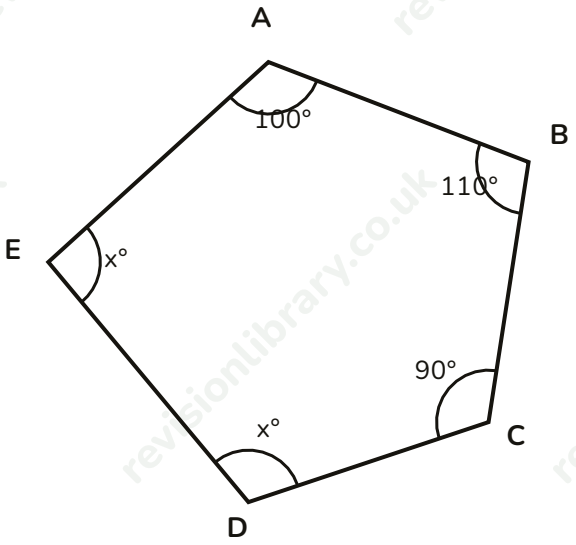
2 Write down the sum of the interior angles of any quadrilateral.

(Total for Question 2 is 1 mark)

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3 The diagram shows a pentagon ABCDE. Angle A = 100 degrees, angle B = 110 degrees, angle C = 90 degrees, and angle D = angle E = x degrees.
Work out the value of x.

Diagram NOT accurately drawn



(Total for Question 3 is 3 marks)

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4 A heptagon has 7 sides.
Calculate the sum of the interior angles of a heptagon.

(Total for Question 4 is 2 marks)

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5 A polygon has 100 sides.
State the sum of its exterior angles.

(Total for Question 5 is 1 mark)

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Mark scheme · 4.11 Angles in Polygons: 10-minute Pack

Question 1

120 degrees cao	**B1**

Answer: 120 degrees

Question 2

360 (degrees) cao	**B1**

Answer: 360 degrees

Question 3

(5 - 2) x 180 (= 540) oe	**M1**
540 - 100 - 110 - 90 (= 240) or 2x = 240	**M1**
x = 120 cao	**A1**

Answer: x = 120 degrees

Question 4

(7 - 2) x 180 oe	**M1**
900 (degrees) cao	**A1**

Answer: 900 degrees

Question 5

360 (degrees) cao	**B1**

Answer: 360 degrees

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