# G8...Angles - Irregular Polygons

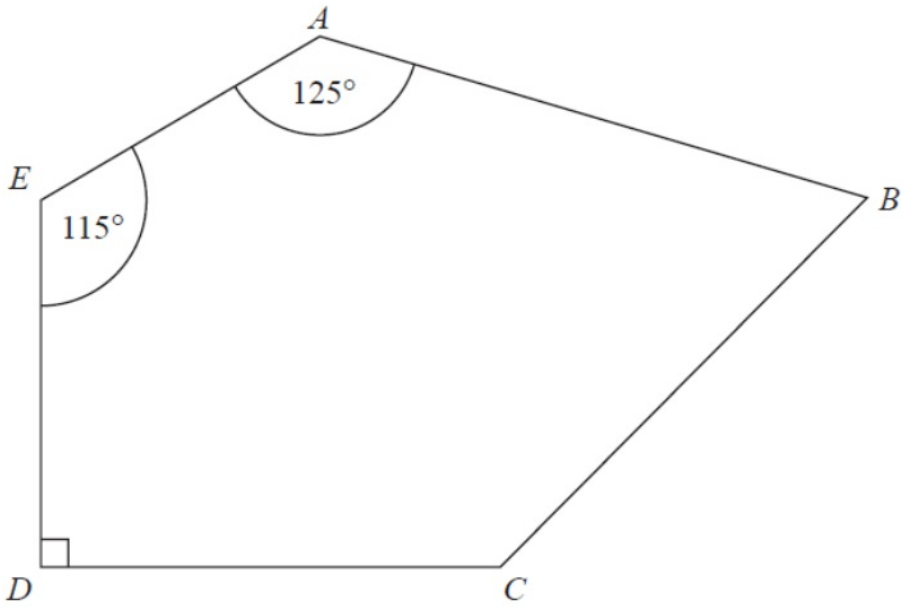
OCR

Edexcel

Video created by W Neill

**26** *ABCDE* is a pentagon.

G8
A16




Angle *BCD* = 2 × angle *ABC*

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

.....°

**(Total for Question 26 is 5 marks)**

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G8
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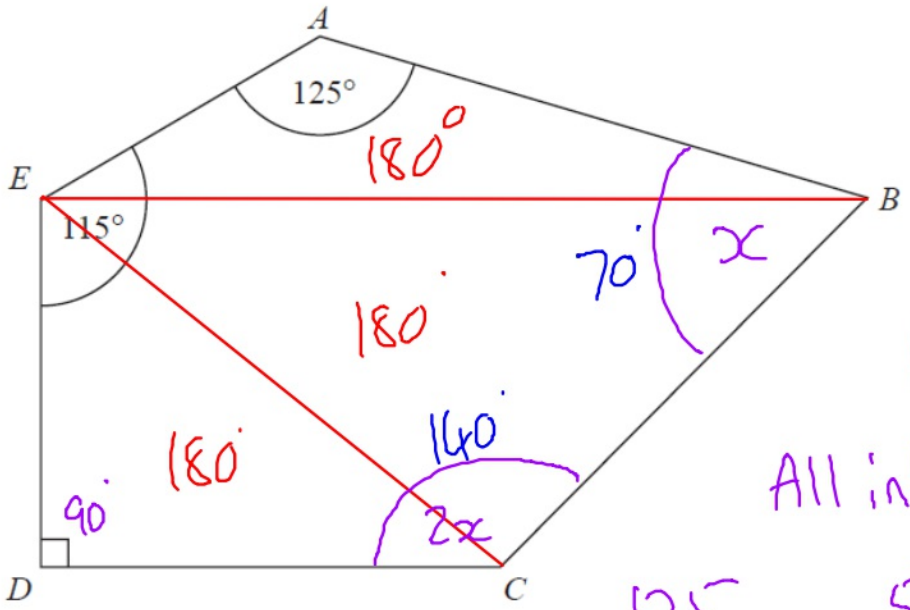


5 sides

3 triangles

$180 \times 3 = 540°$

All interior angles $= 540°$

$$\begin{array}{r} 125 \\ +\ 115 \\ +\ 90 \\ \hline 330 \end{array} \qquad \begin{array}{r} 540 \\ -\ 330 \\ \hline 210 \end{array}$$

$3x = 210$

$x = 70°$

Angle $BCD = 2 \times$ angle $ABC$

Work out the size of angle $BCD$.
You must show all your working.

140° °

**(Total for Question is 5 marks)**

AQA

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**28** The sum of the angles in any quadrilateral is 360°

For example, in a rectangle $4 \times 90° = 360°$

*G8*

Zak writes,

$5 \times 90° = 450°$ so the sum of the angles in any pentagon must be 450°

Is he correct?

Tick a box.

☐ Yes ☐ No

Show working to support your answer.

**[2 marks]**

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G8

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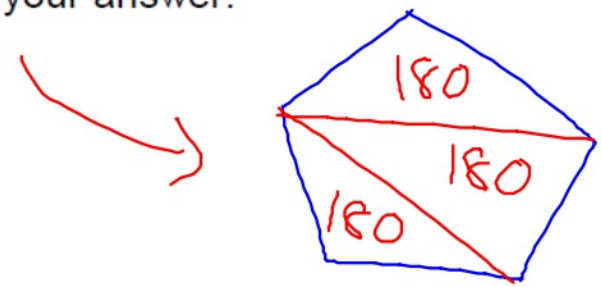


180° x 3

540° ✓

**[2 marks]**