

# Multi Mark 7

1.

You will be assessed on the quality of your written communication in this question.

Pedro has just moved to live on an island in Europe.  
There is a choice of two different water companies.

**Manana Water**  
No Standing Charge  
Pay €0.06 per m<sup>3</sup> of water used

**Channel Water**  
Standing Charge: €30 every 3 months  
+  
€0.02 per m<sup>3</sup> of water used  
Special offer: 20% off your **first** bill

Pedro estimates that he uses 700m<sup>3</sup> of water every three months.  
He wants to spend as little as possible on water.  
Which company should Pedro buy his water from?  
You must justify your answer by showing all possible costs.

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2.

- (a) You will be assessed on the quality of your written communication in this part of the question.

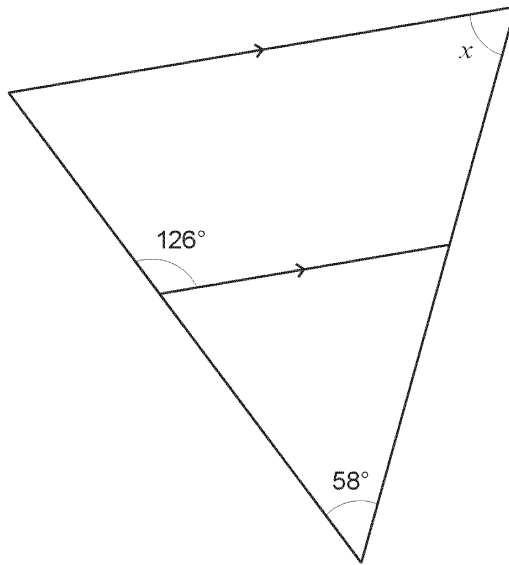


Diagram not drawn to scale

Calculate the size of angle  $x$ .

You must show all your working and explain each step of your answer.

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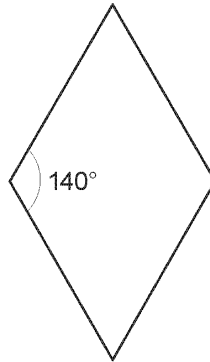
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(b) The tile shown is a rhombus.



*Diagram not drawn to scale*

Explain why tiles identical to the one shown tessellate.  
You must give reasons for your answer.

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