

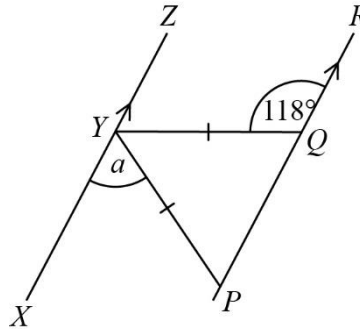
NAME

Time:

Non-Calculator Questions



- 1 PQR and XYZ are straight lines.
 PR is parallel to XZ .
 $PY = QY$.

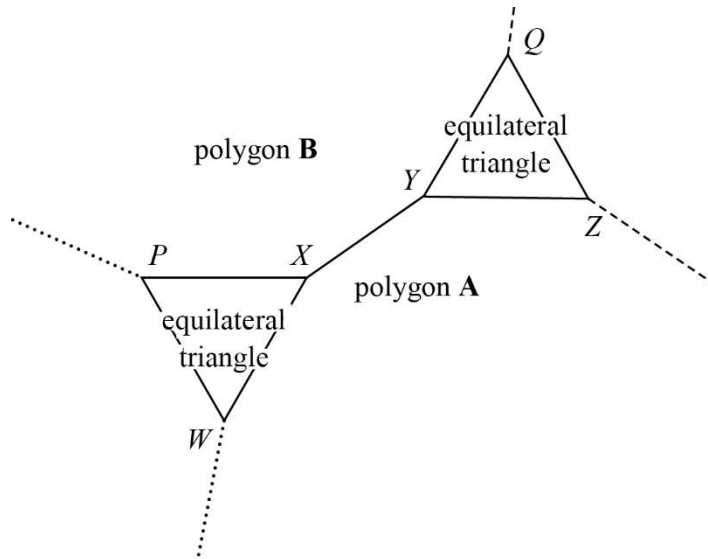


Work out the value of a .
 Give reasons for your answer.

(3 marks)



- 3 In the diagram, WX , XY and YZ are three sides of a regular polygon **A**.
 Polygon **B** is a regular 15 sided polygon.

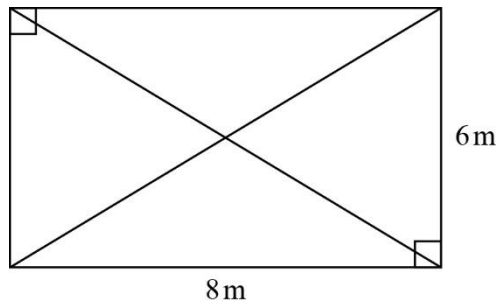


Show that polygon **A** is a regular 10 sided polygon.
 Show your working clearly.

(4 marks)



- 5 A frame is made from six straight pieces of wood.



Work out the total length of the wood in the frame.

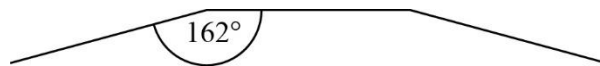
(4 marks)



Calculator Questions



- 7 Each interior angle of a regular polygon is 162°



- a Write down the size of each exterior angle of this polygon.

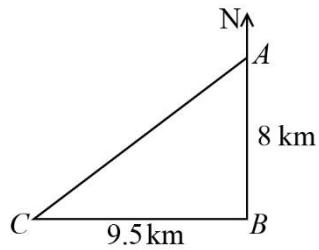
(1 mark)

- b Work out the number of sides of the polygon.

(2 marks)



- 9 The diagram shows the positions of three phone masts A , B and C .

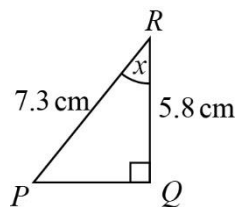


A is 8 km due north of phone mast B .
 C is 9.5 km due west of phone mast B .
 Calculate the distance AC .

(3 marks)



- 11 PQR is a right-angled triangle.



Calculate the size of the angle marked x .
 Give your answer correct to 1 decimal place.

(3 marks)



- 13 Triangle XYZ has a right angle at Z .

Angle $YXZ = 38^\circ$

$XZ = 10.4$ cm

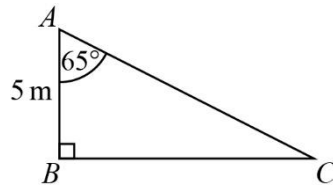
Calculate the length of YZ .

Give your answer to 3 significant figures.

(2 marks)



15 ABC is a right-angled triangle.



Calculate the length of AC .

Give your answer correct to 1 decimal place.

(2 marks)

Overall mark	/50
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