Surname	
Other Names	
Candidate's Signature	

# **GCSE 9 - 1 Questions**

## **Angle Problems**

## **Calculator Allowed**

#### **INSTRUCTIONS TO CANDIDATES**

Write your name in the space provided.

Write your answers in the spaces provided in this question paper.

Answer ALL questions.

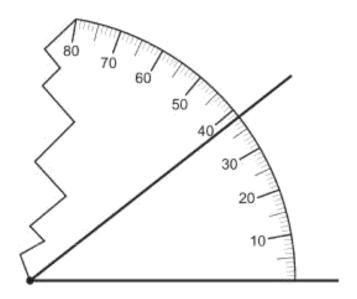
Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

You should have a ruler, compass and protractor where required.

Total Marks :		

 The diagram below shows an angle measurer that has been placed to measure the size of an angle.

What is the size of the angle that is being measured?



[1]

2) AB is a straight line.

Calculate the size of angle x.

[2]

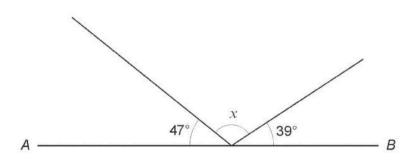


Diagram not drawn to scale

Angle	Name of angle	Reason
	Acute	The angle is between 0° and 90°

[2]

### 4) Find the size of angle x.

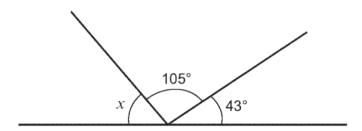


Diagram not drawn to scale

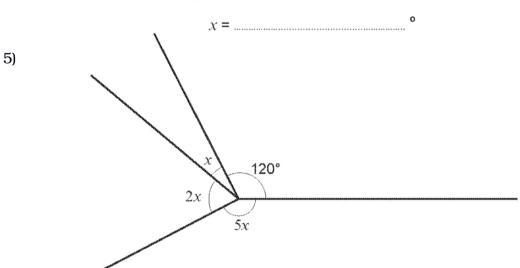


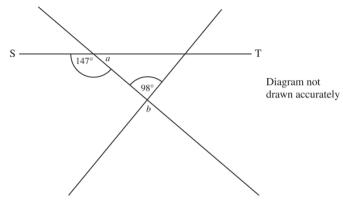
Diagram not drawn to scale

All the angles shown are measured in degrees.
Find the value of x which satisfies this diagram.
You must show all your working.

[3]

Visit <u>www.mathsnote.com</u> for more resources

6)

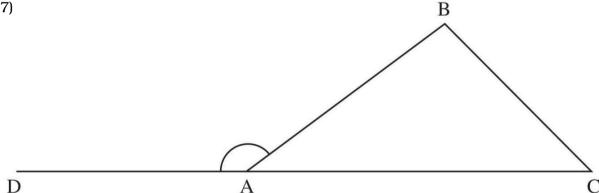


Calculate the size of angles a and b.

Answer  $a = ____^{\circ} [1]$ 

Answer  $b = ____^{\circ} [1]$ 

7)



Explain why the exterior angle DAB of the triangle ABC is equal to the sum of the interior angles B and C of triangle ABC.

Answer \_\_\_\_\_

[3]

8)

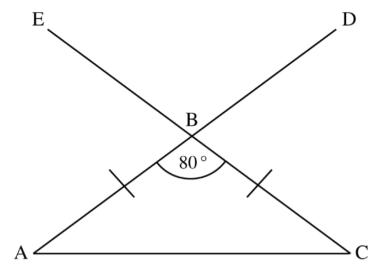


Diagram not drawn accurately

ABC is an isosceles triangle. ABD and CBE are straight lines. Angle ABC is  $80^{\circ}$ 

Find the size of

(i) angle EBD,

Answer \_\_\_\_\_° [1]

(ii) angle BAC.

Answer \_\_\_\_\_° [2]

9)	Calculate the exact angle between the hour hand and the minute hand on a clock when the is 5 p.m.  You must show your working.	a clock when the time	
		***************************************	
		•••••••	
		***********	
	Find the size of angles $a$ and $b$ . [3]		
	Diagram not drawn to scale		
	a = ° b = °		