

Name: \_\_\_\_\_

## GCSE (1 – 9)

### Angles

#### Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

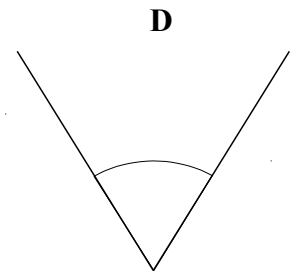
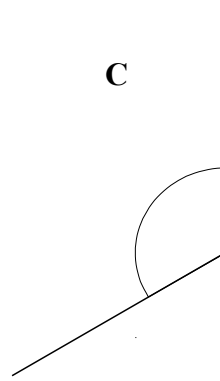
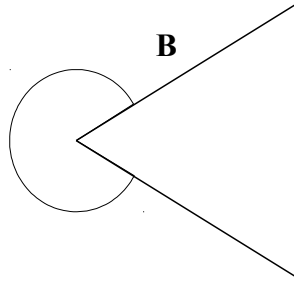
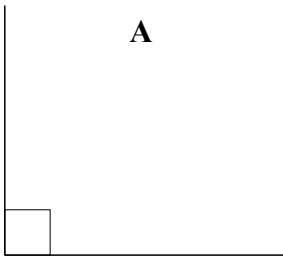
#### Information

- The marks for each question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*

#### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

1 Here are four angles A, B, C and D.



(a) Measure the size of angle C.

(b) Match the angle mathematical name to the angle.

Mathematical Name	Angle
Acute Angle	
Obtuse Angle	
Right Angle	
Reflex Angle	

(Total for question 7 is 3 marks)

2 In the space below draw an angle of  $60^\circ$   
Label the angle *A*.

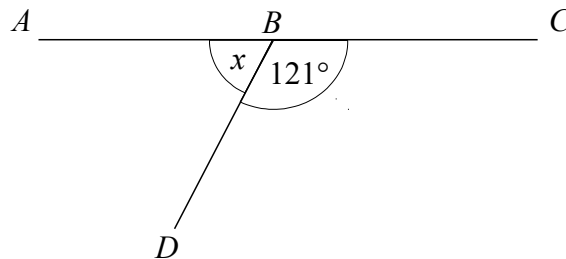
(Total for question 2 is 1 mark)

- 3 In the space below draw an angle of  $110^\circ$   
Label the angle  $B$ .

(Total for question 3 is 1 mark)

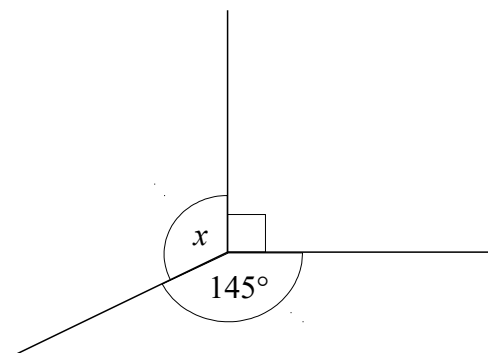
**Diagrams are NOT accurately drawn, unless otherwise indicated.**

- 4  $ABC$  is a straight line. Work out the size of the angle marked  $x$ .



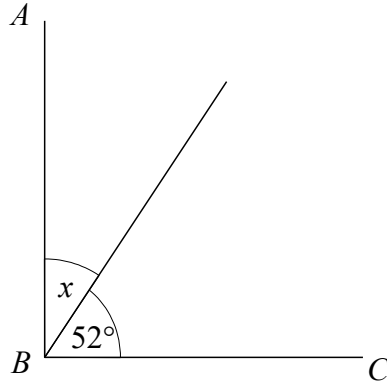
(Total for question 4 is 2 marks)

- 5 Work out the size of the angle marked  $x$ .



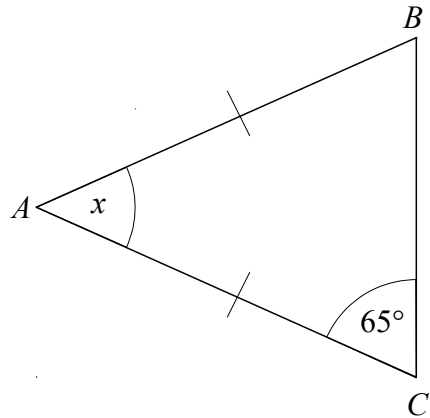
(Total for question 5 is 2 marks)

6  $AB$  and  $BC$  are perpendicular lines. Work out the size of the angle marked  $x$ .



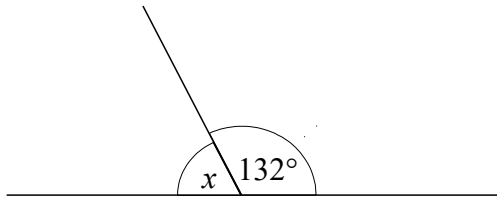
.....  
(Total for question 6 is 2 marks)

7  $ABC$  is an isosceles triangle. Work out the size of the angle marked  $x$ .



.....  
(Total for question 7 is 2 marks)

8



(a) Work out the size of the angle marked  $x$ .

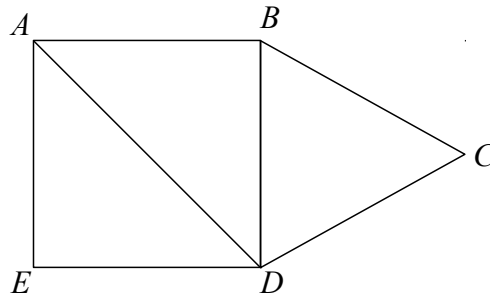
.....  
○

(b) Give a reason for your answer.

.....  
.....

**(Total for question 8 is 2 marks)**

9 The diagram shows a square  $ABDE$  and an equilateral triangle  $BCD$ .



(a) Write down the size of angle  $ABD$

.....  
○

(b) Write down the size of angle  $BCD$

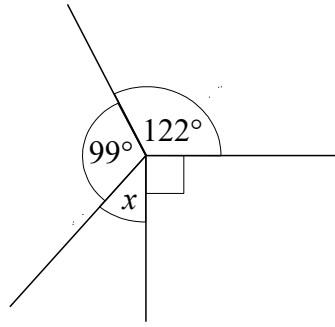
.....  
○

(c) Find the size of angle  $ADC$

.....  
○

**(Total for question 9 is 4 marks)**

10



(a) Work out the size of the angle marked  $x$ .

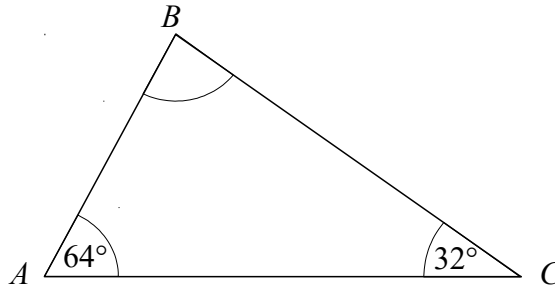
(b) Give a reason for your answer.

.....

.....  
.....

**(Total for question 10 is 2 marks)**

11



(a) Work out the size of the angle  $ABC$ .

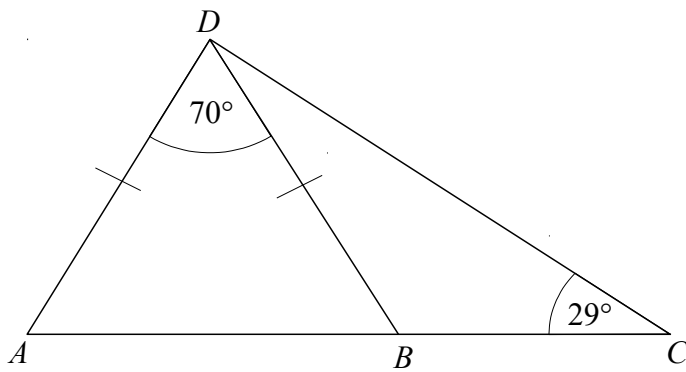
(b) Give a reason for your answer.

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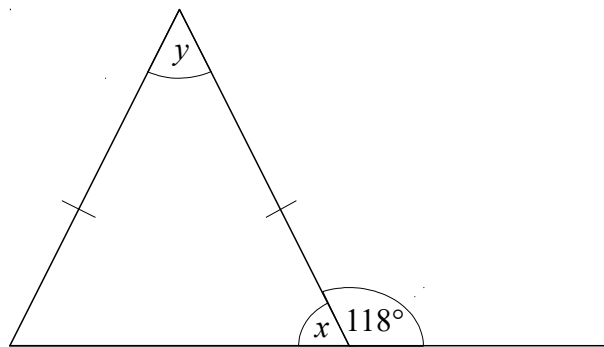
**(Total for question 11 is 2 marks)**

12  $ABC$  is a straight line. Work out the size of the angle  $BDC$ .



.....  
(Total for question 12 is 4 marks)

13



(a) Work out the size of the angle marked  $x$ .

.....

(b) Work out the size of the angle marked  $y$ .

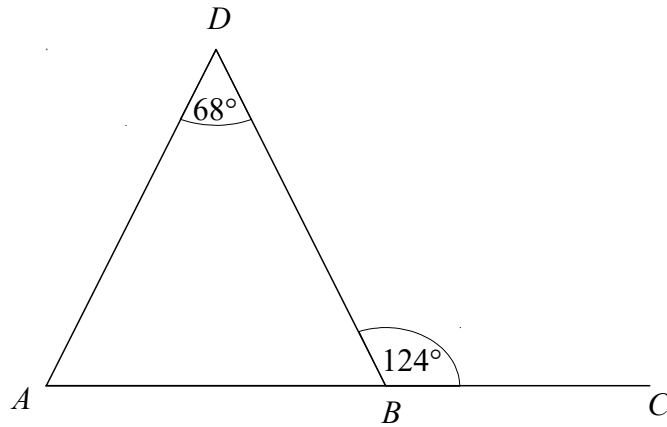
.....

(c) Give reasons for your answer.

.....  
.....  
.....

(Total for question 13 is 3 marks)

14  $ABC$  is a straight line.



Show that  $ABD$  is an isosceles triangle

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(Total for question 14 is 4 marks)