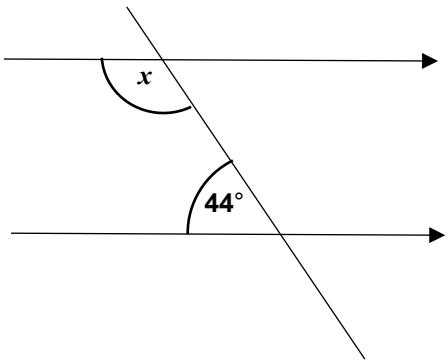
Delta 1
Unit 5 Review (Non-Calculator)
Angles and Shapes

How well did you do:

Angles and Shapes	Score = $\frac{\quad}{50}$	

Topics/skills which need to be revisited:	***Questions from the review***	***Further Practice from Delta 1***
• Find angles contained in parallel lines • Justify how you found your answer (using corresponding/ alternate/co-interior angle facts)	• 1a,5,10 • 1b	• P121 Q3,4 • P122 Q5
• Find angles contained in or around a triangle • Know the line and rotational symmetry of triangles	• 3,13 • 8	• P122 Q4,5 • Learn key point P110
• Find angles contained in or around a quadrilateral • Know the line and rotational symmetry of quadrilaterals • Use properties of quadrilaterals to find missing information	• 2,7,9,12 • 8 • 16	• P123 Q7 • P123 Q6 • P123 Q10
• Find the sum of interior angles in a polygon • Find one interior angle in a regular polygon • Find one exterior angle in a regular polygon • Find the number of sides of a regular polygon when given one interior (or exterior) angle • Find missing angles in a complicated diagram using all angle facts • Understand the connection between the interior and exterior angles of regular polygons	• 4 • 14a • 6 • 11 • 14bcd • 15	• P123 Q2 • P130 Q13b • P130 Q13a • P130 Q14 • P130 Q15 • P127 Q18

1



a Find x

.....°

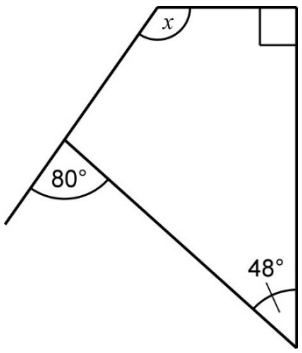
b Give a reason for your answer

.....

.....

(2 marks)

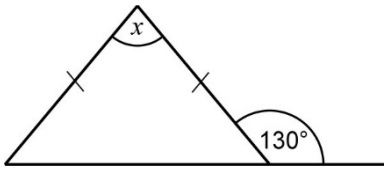
2 Work out the size of angle x.



.....°

(3 marks)

3 Find the size of angle x.



.....°

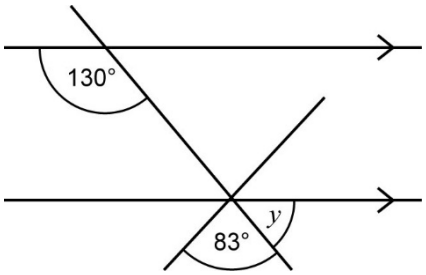
(3 marks)

4 What are the sum of interior angles in an Octagon?

.....°

(2 marks)

5 Find the size of angle y.



.....°

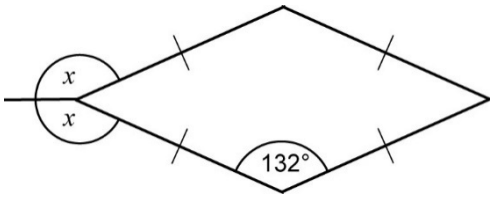
(2 marks)

6 Calculate the size of the external angle of a regular decagon (10 sides).

.....

(2 marks)

7 Find the size of angles x.



.....°

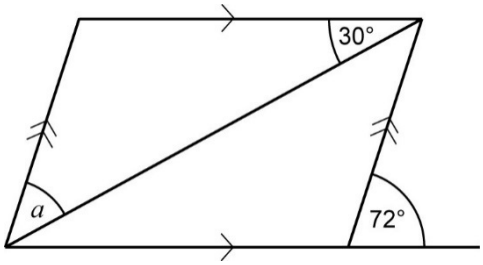
(3 marks)

8 Fill in the table below

Shape	Order of rotational symmetry	Number of lines of symmetry
Parallelogram		
Equilateral Triangle		
Kite		

(6 marks)

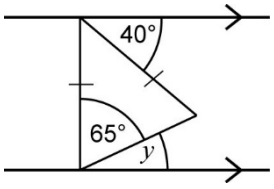
9 Find the size of angle a.



.....……°

(3 marks)

10 Find the size of angle y.



.....……°

(4 marks)

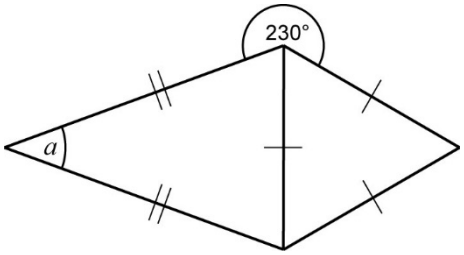
11 A regular polygon has an interior angle of 156°.

Work out the number of sides.

.....

(3 marks)

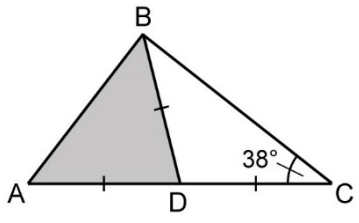
12 Calculate the size of the angle a.



..... °

(3 marks)

13 Here is a triangle ABC.



D lies on AC such that AD = DC = DB

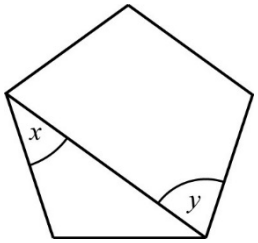
Angle BCA = 38°.

Work out the size of angle ABC.

..... °

(3 marks)

14 Here is a regular pentagon.



a Find the size of one interior angle

..... °

b Work out the size of angle x.

..... °

c Work out the size of angle y.

..... °

(6 marks)

15 A regular polygon has an exterior angle of $x°$.

Given that the interior angle is 4 times the exterior angle, work out the value of x.

.....

(3 marks)

16 A Parallelogram has vertices with the coordinates (1,2), (3,4), (5,2) and (p,q)

Find p and q.

p=..... q=.....

(2 marks)