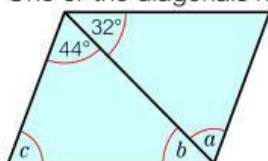


9 Check up

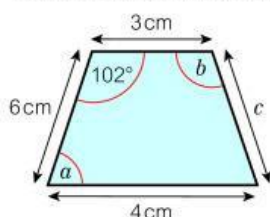
Quadrilaterals

- 1 Name each quadrilateral being described.
 - a All my angles are 90° . My diagonals bisect each other at 90° .
 - b My diagonals bisect each other at 90° , all my sides are equal, but my angles are not 90° .
 - c I have one pair of parallel sides and two sides of equal length
- 2 One of the diagonals has been drawn in this parallelogram.



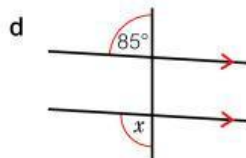
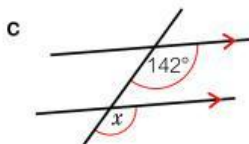
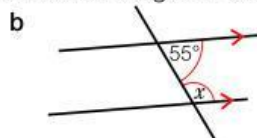
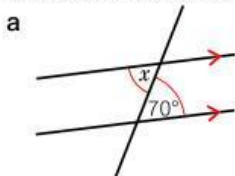
Work out the size of angles a , b and c .
Give a reason for each answer.

- 3 Here is an isosceles trapezium.
 - a Work the size of angles a and b .
Give a reason for each answer
 - b Write down the length of c .
Give a reason for your answer.

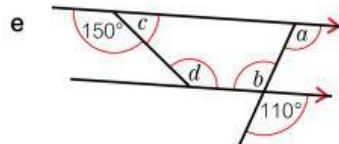
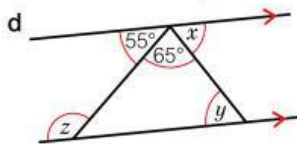
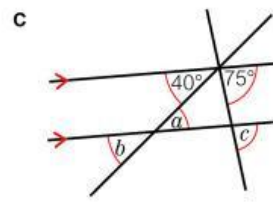
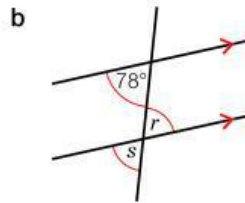
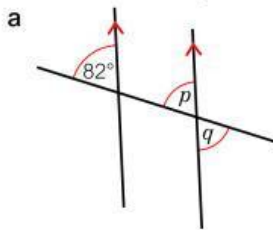


Angles and parallel lines

- 4 Work out the size of angle x in each diagram. Give reasons.



- 5 Work out the sizes of the angles marked with letters in these diagrams.
Give reasons for your answers.



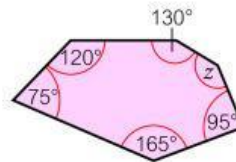
Angles in polygons



- 6 Work out the sum of the interior angles of this polygon.



- 7 The diagram shows an irregular hexagon.
a What is the sum of the interior angles of a hexagon?
b Work out the size of angle z.



- 8 a Work out the exterior angle of a regular decagon (10-sided polygon). Show your working.
b Work out the interior angle of a regular decagon.
- 9 The diagram shows the exterior angle of a regular polygon. Work out how many sides the polygon has.



- 10 How sure are you of your answers? Were you mostly
 😞 Just guessing 😟 Feeling doubtful 😊 Confident
 What next? Use your results to decide whether to strengthen or extend your learning.

Challenge

- 11 The diagram shows two sets of parallel lines. Write down
 a two pairs of alternate angles
 b two pairs of corresponding angles
 c two pairs of angles that sum to 180°
 d two sets of three angles that sum to 180°
 e two sets of four angles that sum to 360°
 f two sets of six angles that sum to 360° .

