



Check out

You should now be able to ...

✓ Know and use angle facts for triangles and parallel lines.	6	1
✓ Know and use properties of quadrilaterals and regular polygons.	6	2
✓ Calculate interior and exterior angles of polygons.	6	3 - 4
✓ Use congruence.	7	5 - 6

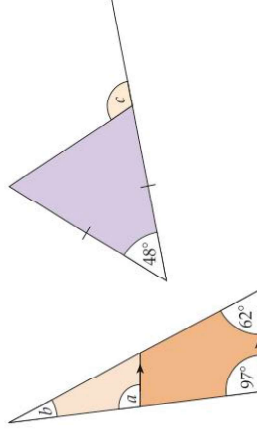
Test it

Questions



1 Calculate the value of the letters.

Explain which geometric facts you use in each case.



3

For a regular octagon, find

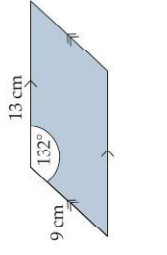
- the number of lines of symmetry
- the order of rotational symmetry
- the size of an interior angle
- the size of an exterior angle.

4 For each shape, decide whether or not it tessellates.

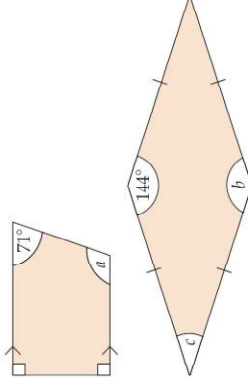
- an isosceles triangle
- a rectangle
- a regular pentagon
- a regular hexagon

5 These two parallelograms are congruent. State

- the length of AB
- the size of angle x
- the size of angle y .



2 Calculate the value of the letters.



6 Show how you can divide a regular octagon into four congruent kites.

What next?

Score	What next?
0 - 2	Your knowledge of this topic is still developing. To improve look at Formative test: 3B-5; MyMaths: 1080, 1082, 1100 and 1109
3 - 5	You are gaining a secure knowledge of this topic. To improve look at InvisiPen: 317, 342, 343, 344, 345 and 346
6	You have mastered this topic. Well done, you are ready to progress!



Language Meaning Example

Alternate angles	When referring to parallel lines: 'Z shaped' pairs of angles.		Example
Congruent	Two shapes are congruent if they are exactly the same size and shape.		Example
Corresponding angles	When referring to parallel lines: 'F-shaped' pairs of angles.		Example
Polygon	A closed 2D shape. It is a regular polygon when all the sides and angles are equal.		Example
Interior angle	An angle inside a polygon.		Example
Exterior angle	The angle made between the side of a polygon and its extension.		Example