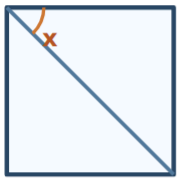
YEAR 8 • GEOMETRY

Properties of Quadrilaterals

Name _____ **Date** _____

Use the properties of each shape to find the missing angle or angles. Show a calculation or a short reason in the space provided. Diagrams are not drawn to scale.

1 Square

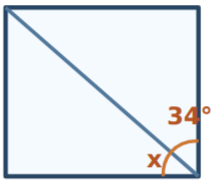


A diagonal is drawn. Find **x**, the angle between the diagonal and a side.

x = _____ °

Working / reason:

2 Rectangle

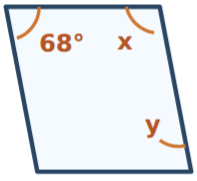


The diagonal makes **34°** with the right-hand side. Find **x**, the angle it makes with the bottom side.

x = _____ °

Working / reason:

3 Parallelogram



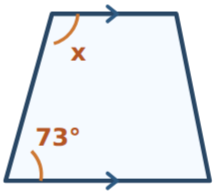
One interior angle is **68°**. Find **x** and **y**.

x = _____ °

y = _____ °

Working / reason:

4 Trapezium

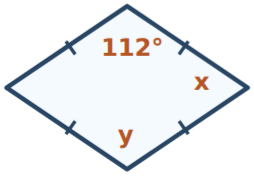


The top and bottom sides are parallel. Find **x**.

x = _____ °

Working / reason:

5 Rhombus



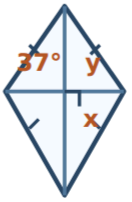
One interior angle is **112°**. Find **x** and **y**.

x = _____ °

y = _____ °

Working / reason:

6 Kite



The vertical diagonal is the line of symmetry. Find **x** and **y**.

x = _____ °

y = _____ °

Working / reason:

Before you finish, check that each angle is sensible for its shape.