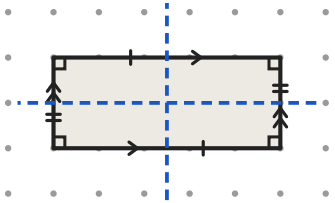
Properties of quadrilaterals

ANSWERS

1

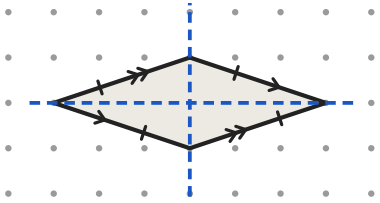
Use the marks to complete the properties.
Draw the lines of symmetry.
Name the shape.



pairs of parallel sides:	2
equal sides:	opposite
right angles:	4
lines of symmetry:	2
name:	rectangle

2

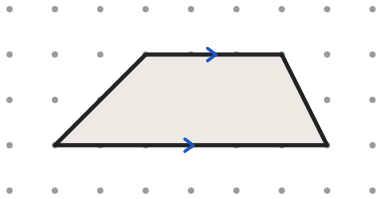
Use the marks to complete the properties.
Draw the lines of symmetry.
Name the shape.



pairs of parallel sides:	2
equal sides:	all 4
right angles:	0
lines of symmetry:	2
name:	rhombus

3

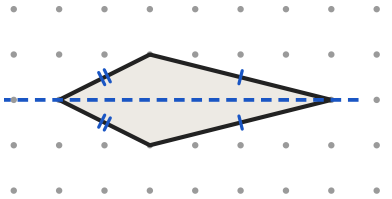
Add the marks. Complete the properties and name the shape.



pairs of parallel sides:	1
equal sides:	none
right angles:	0
lines of symmetry:	0
name:	trapezium

4

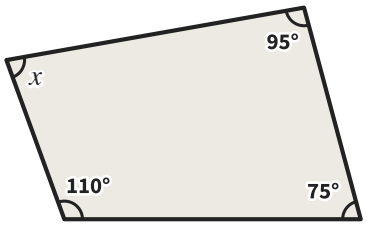
Add the marks. Complete the properties and name the shape.



pairs of parallel sides:	0
equal sides:	2 pairs, adjacent
right angles:	0
lines of symmetry:	1
name:	kite

5

Find angle x.



angles add up to:	360°
angles you know:	110 + 75 + 95 = 280
360 take away:	360 − 280 = 80
x =	80°

6

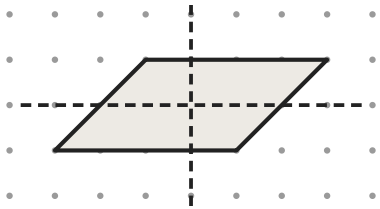
What am I? I have four right angles.
My sides are not all equal. Cross out the shapes that don't fit.

~~square~~ **rectangle** ~~rhombus~~ ~~parallelogram~~ ~~trapezium~~ ~~kite~~

four right angles:	square, rectangle
not all equal:	not a square
I am a	rectangle

7

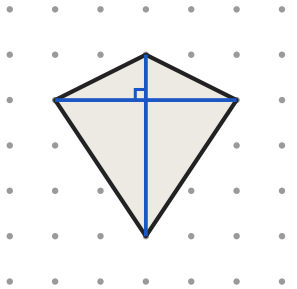
Sam draws two lines of symmetry on this parallelogram. Explain why he is wrong.



fold on a line:	the halves don't match
lines of symmetry:	0

8

Draw the diagonals of this kite.



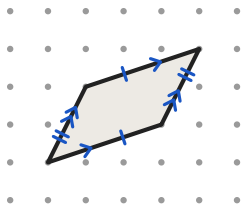
cross at right angles?	yes
cut each other in half?	no

Properties of quadrilaterals *further practice*

ANSWERS

9

Name this shape. How many lines of symmetry does it have?



2 pairs of parallel sides, no right angles

fold it: the halves don't match

Answer *parallelogram, 0*

10

What am I? I have four equal sides.
My diagonals cross at right angles.
I have four lines of symmetry.

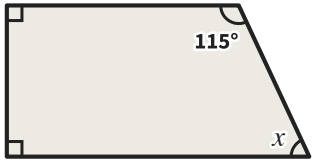
four equal sides: square or rhombus

four lines of symmetry: square

Answer *square*

11

Find angle x.



90 + 90 + 115 = 295

360 – 295 = 65

Answer *65°*

12

Which of these shapes have diagonals that cross at right angles: square, rectangle, rhombus, parallelogram, kite?

draw the diagonals of each

not the rectangle or parallelogram

Answer *square, rhombus, kite*

13

Isla measures three angles of a window frame. Each one is 90°.
Find the fourth angle.
Which two shapes could the frame be?

360 – 90 – 90 – 90 = 90

four right angles: square or rectangle

Answer *90°; square or rectangle*

14

A kite for a display has one side 6 cm long and another side 11 cm long.
Find its perimeter.

two pairs of equal sides: 6, 6, 11, 11

6 + 6 + 11 + 11 = 34

Answer *34 cm*

15

Kai says a quadrilateral has angles 95°, 85°, 95° and 95°. Explain why he must be wrong.

95 + 85 + 95 + 95 = 370

a quadrilateral's angles add up to 360°

Answer *they add up to 370°*

16

Is every square also a rhombus?
Explain, using the properties.

a square has 4 equal sides, 2 pairs parallel

so it fits a rhombus, with right angles too

Answer *Yes*