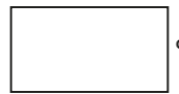
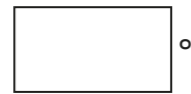
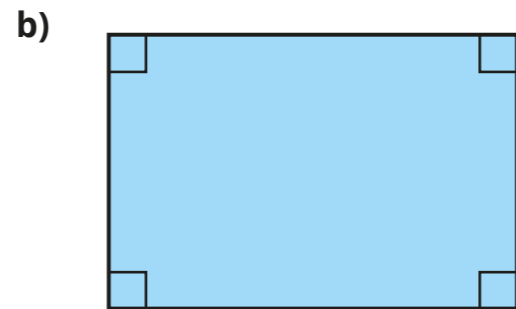
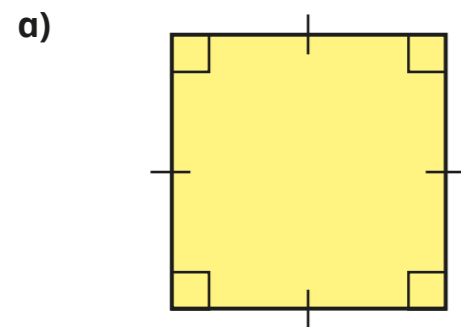


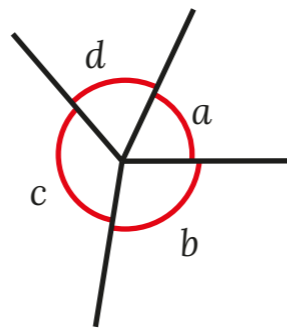
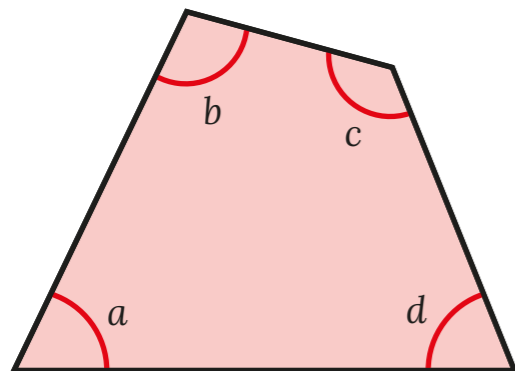
Angles in a quadrilateral

1 Work out the sum of the angles in each shape.



What do you notice?

2 The diagrams show the four vertices of a quadrilateral arranged around a point.

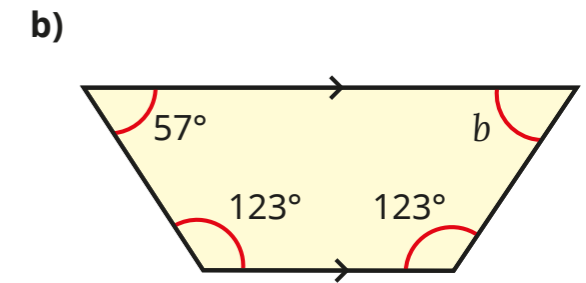
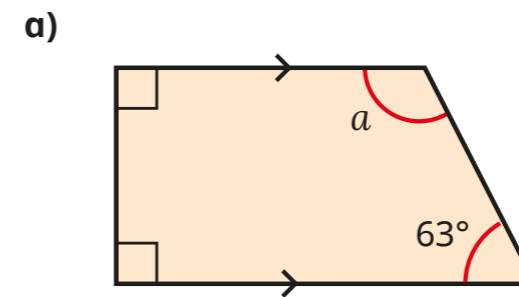


What do the diagrams illustrate about the sum of the angles in a quadrilateral?

Complete the sentence.

Angles in a quadrilateral _____

3 Work out the size of the unknown angle in each trapezium.

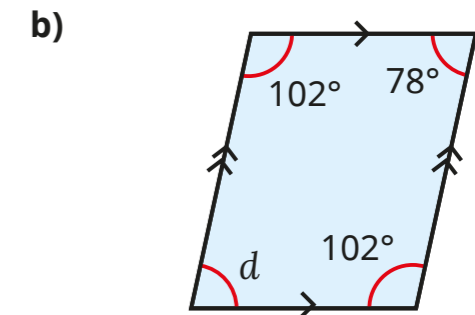
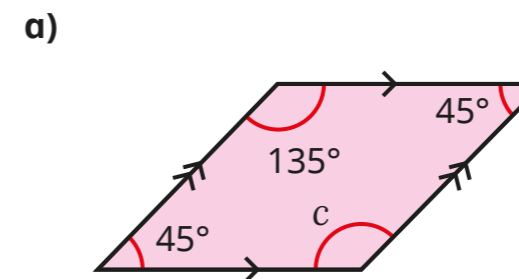


$a = \text{[]}^\circ$

$b = \text{[]}^\circ$

What is the same and what is different about the trapeziums?

4 Work out the sizes of the unknown angles.



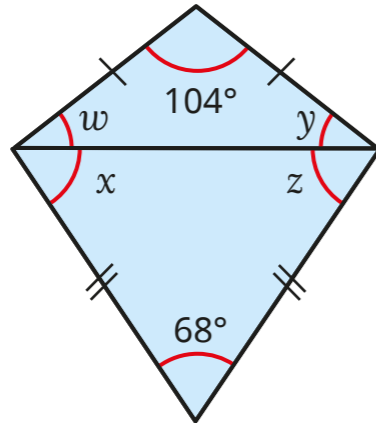
$c = \text{[]}^\circ$

$d = \text{[]}^\circ$

c) What do you notice about opposite angles in a parallelogram?

5 Two isosceles triangles are joined to form a kite.

a) Work out the sizes of the unknown angles.



$w = \square^\circ$ $y = \square^\circ$ $x = \square^\circ$ $z = \square^\circ$

b) Work out $w + x$.

\square°

c) Work out $y + z$.

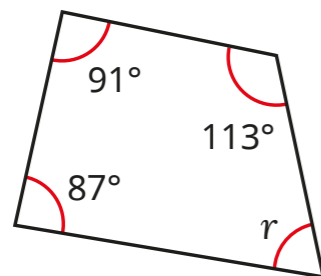
\square°

What do you notice? Talk about it with a partner.



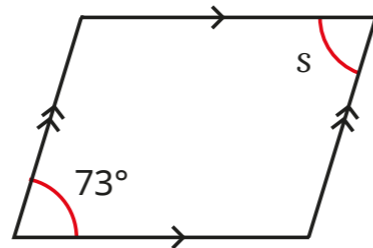
6 Work out the sizes of the angles marked with letters.

a)



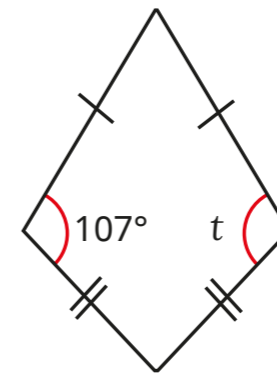
$r = \square^\circ$

b)



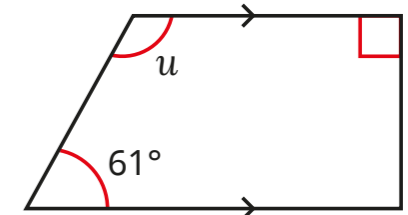
$s = \square^\circ$

c)



$t = \square^\circ$

d)

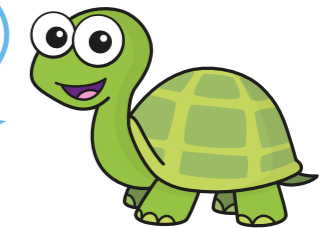


$u = \square^\circ$

Compare your reasoning with a partner's.

7 Tiny is looking at a shape.

This quadrilateral has exactly three right angles.



Is Tiny's shape a quadrilateral? _____

Explain your answer.

