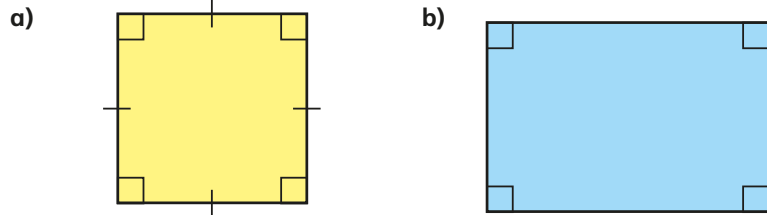
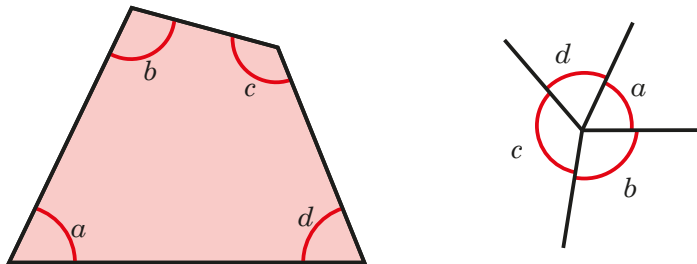


1 Work out the sum of the angles in each shape.



What do you notice?

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

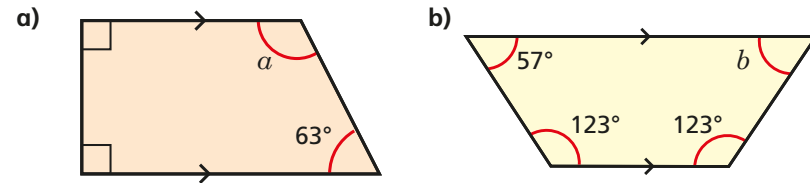


What do the diagrams illustrate about the sum of the angles in a quadrilateral?

Complete the sentence.

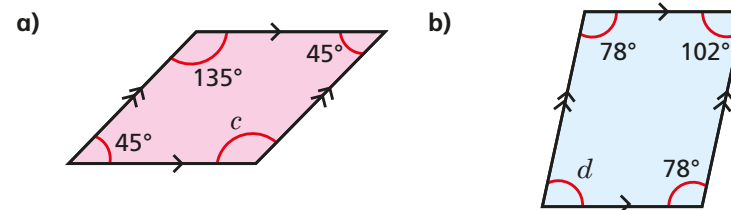
Angles in a quadrilateral \_\_\_\_\_

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



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

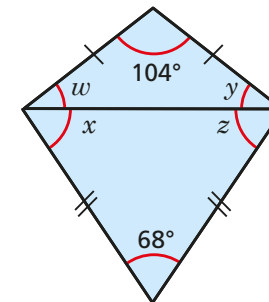
4 Work out the sizes of the unknown angles.



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.

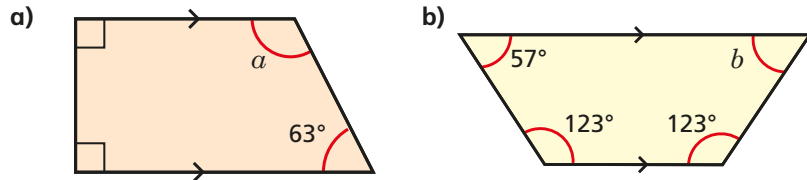


b) Work out  $w + x$ .

c) Work out  $y + z$ .

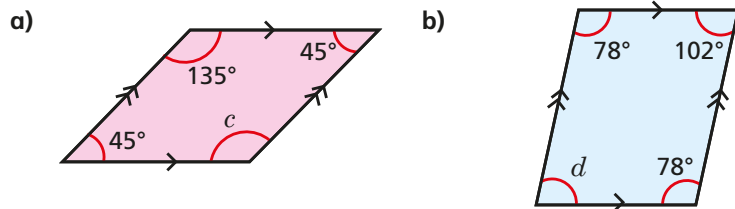
What do you notice? Talk about it with a partner.

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



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

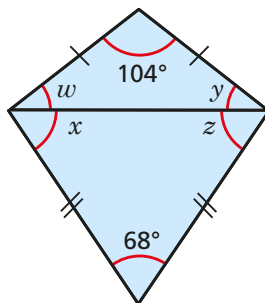
4 Work out the sizes of the unknown angles.



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.

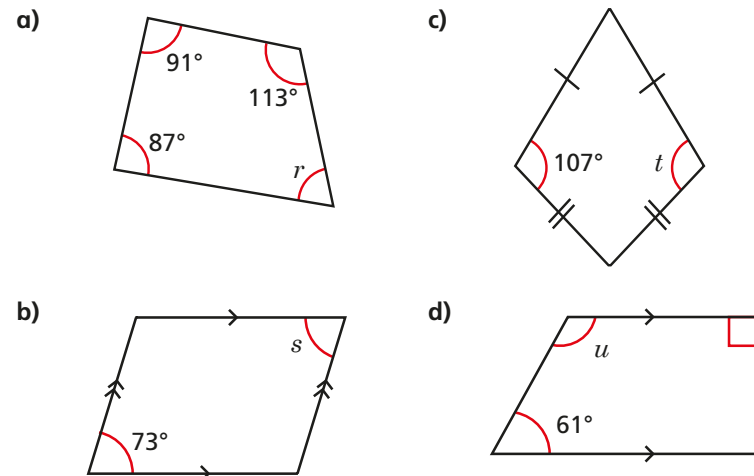


b) Work out  $w + x$ .

c) Work out  $y + z$ .

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

6 Work out the sizes of the unknown angles.



Compare your reasoning with a partner.

7 Teddy is drawing a quadrilateral.

My quadrilateral has exactly three right-angles.



Is Teddy's quadrilateral possible?

Explain your answer.