

# Identify angles

1 Complete the sentences.

Use the word bank to help you.

90

180

greater

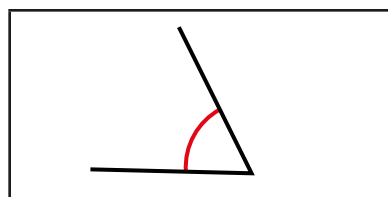
less

a) A right angle is  degrees.

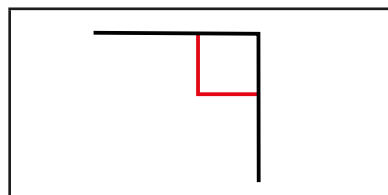
b) An acute angle is \_\_\_\_\_ than  degrees.

c) An obtuse angle is \_\_\_\_\_ than  degrees  
but less than  degrees.

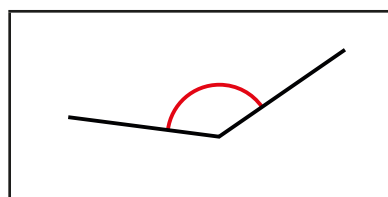
2 Match the angles to the labels.



right angle



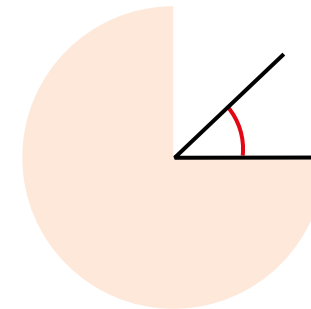
acute angle



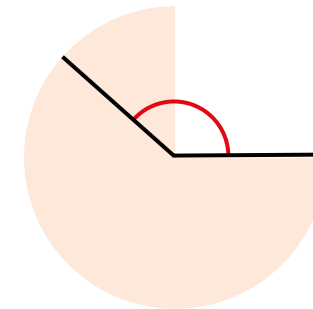
obtuse angle

3 Label the angles: acute, obtuse or right angle.

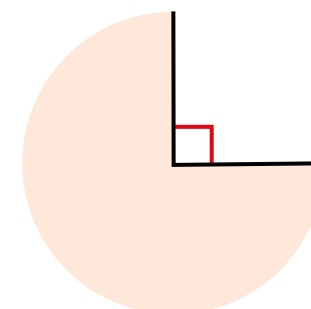
a)



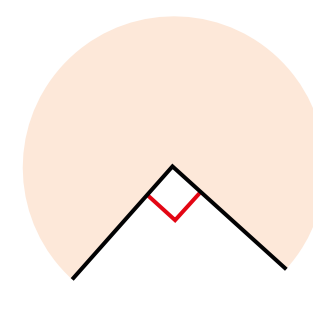
d)



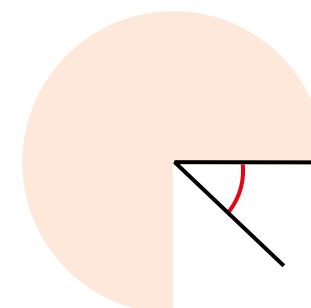
b)



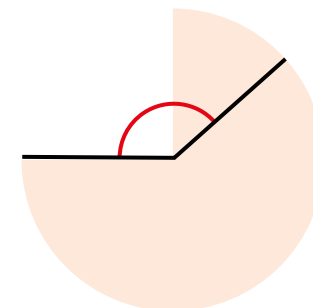
e)



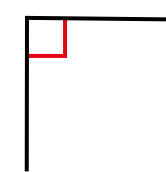
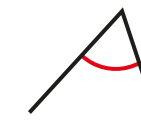
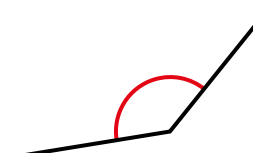
c)



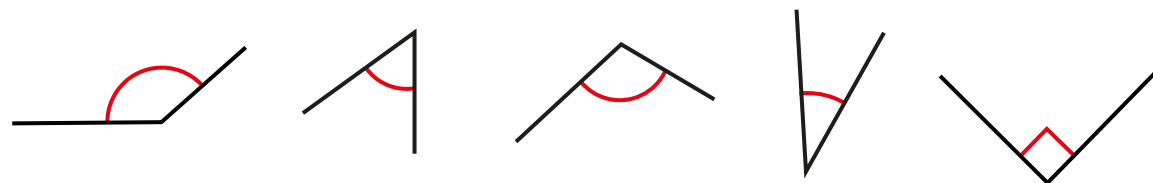
f)



4 Tick all the acute angles.

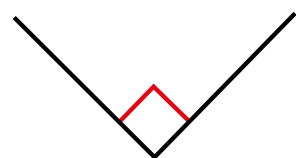


5 Tick all the obtuse angles.



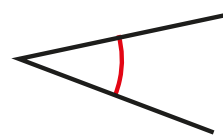
6 Label the angles: acute, obtuse or right angle.

a)



\_\_\_\_\_

c)



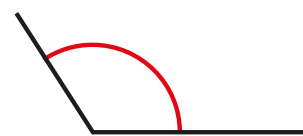
\_\_\_\_\_

b)



\_\_\_\_\_

d)



\_\_\_\_\_

7 Is the angle acute, obtuse or a right angle?

a)  $35^\circ$  \_\_\_\_\_

d)  $89^\circ$  \_\_\_\_\_

b)  $99^\circ$  \_\_\_\_\_

e)  $121^\circ$  \_\_\_\_\_

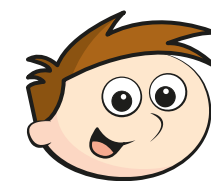
c)  $90^\circ$  \_\_\_\_\_

f)  $179^\circ$  \_\_\_\_\_

How do you know?

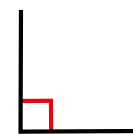


8

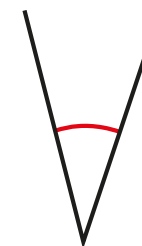


Angle B is obtuse because it's bigger than the right angle.

A



B



Do you agree with Teddy? \_\_\_\_\_

Explain your answer.

9

Are the statements always true, sometimes true or never true?

Explain your answer.

a) An obtuse angle is a greater turn than an acute angle.

\_\_\_\_\_

b) An acute angle is a greater turn than a right angle turn.

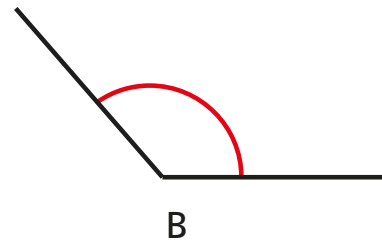
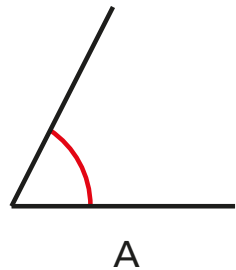
\_\_\_\_\_

c) If you turn through two acute angles you will have turned through an obtuse angle.

\_\_\_\_\_

# Compare and order angles

1 Here are two angles.

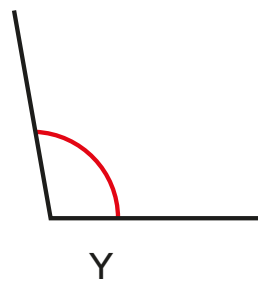
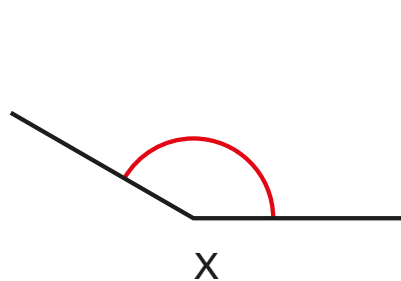


a) Which angle is obtuse?

b) Which angle is acute?

How do you know?

2 Here are two angles.



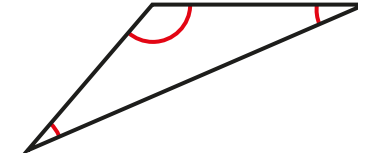
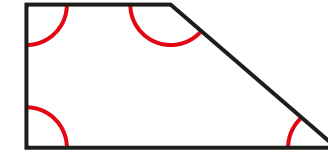
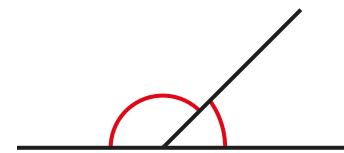
a) What type of angle is angle X?

b) What type of angle is angle Y?

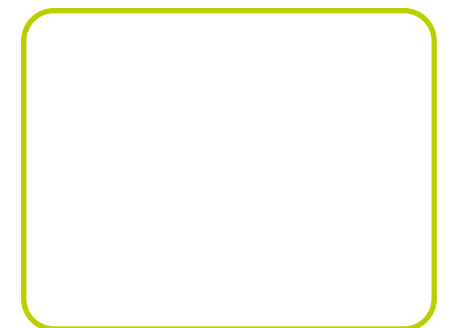
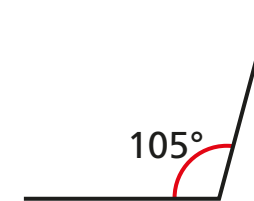
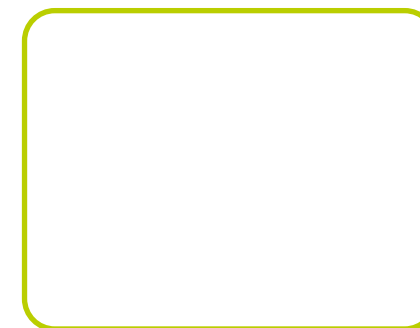
c) Which angle is smaller?

How do you know?

3 Circle the greatest angle in each diagram.



4 Here is an angle.



a) Draw a smaller angle than  $105^\circ$  in the box on the left.

b) Draw a greater angle than  $105^\circ$  in the box on the right.

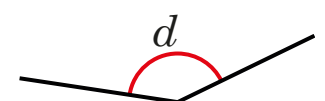
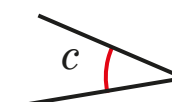
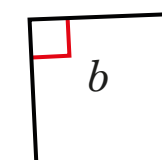
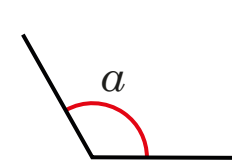
c) Is this statement true or false?

The angles are in ascending order of size.

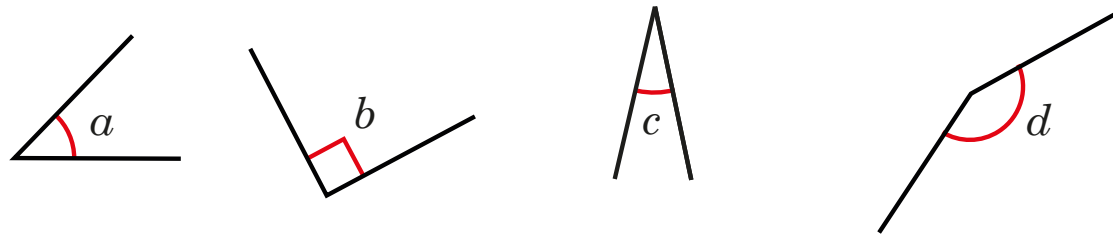
Explain your answer.

5 Order the angles from greatest to smallest.

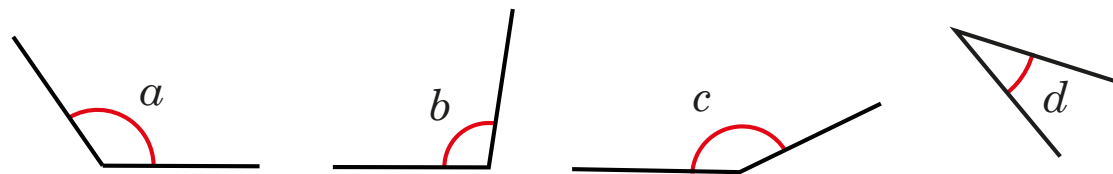
a)



b)

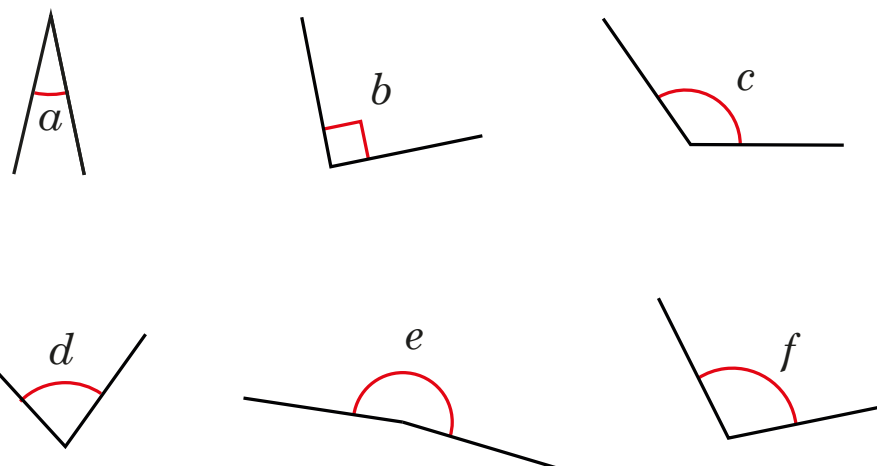


c)



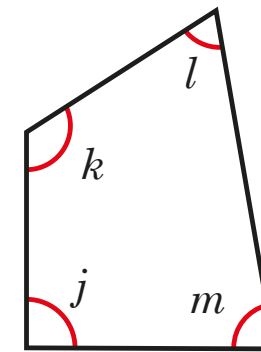
6

Compare and order the angles from smallest to greatest.



7

Four angles are labelled in the quadrilateral.



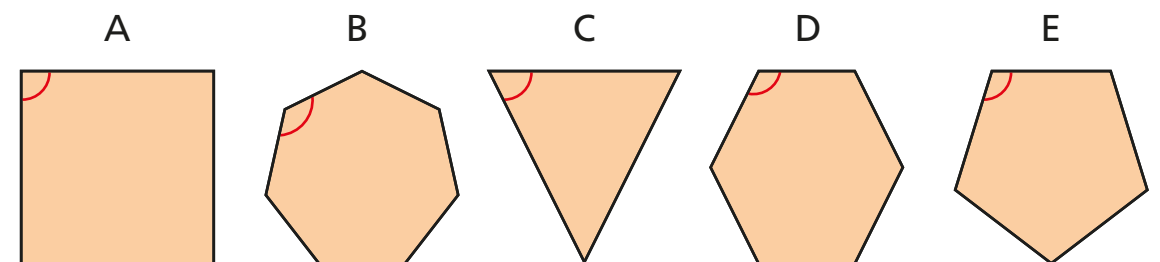
a) Which of the angles are acute angles? \_\_\_\_\_

b) Which of the angles are obtuse angles? \_\_\_\_\_

c) Write the angles in order of size, starting with the smallest.  
\_\_\_\_\_

8

An interior angle is marked in each polygon.



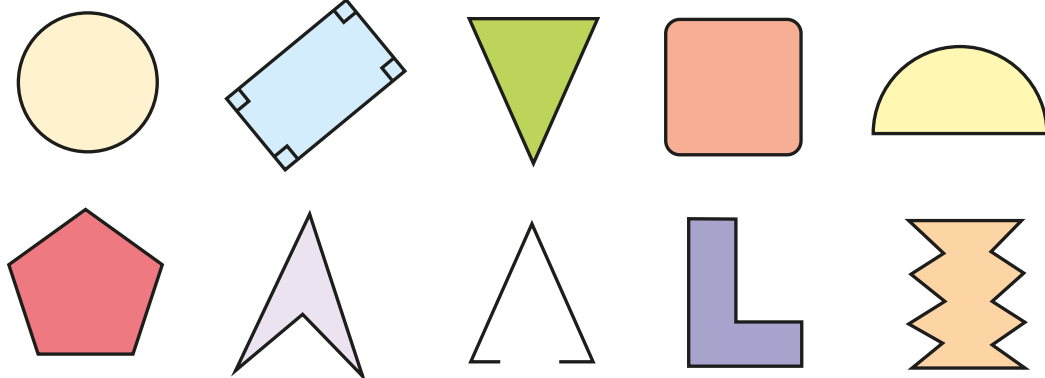
Order the interior angles of the polygons from smallest to greatest.  
\_\_\_\_\_

What do you notice about the number of sides a polygon has and the size of its interior angle?  
\_\_\_\_\_



# Triangles

1 Here are some shapes.



- Tick the polygons.
- Talk to a partner about the shapes you have not ticked.  
Why are they not polygons?
- Write a definition of a polygon.

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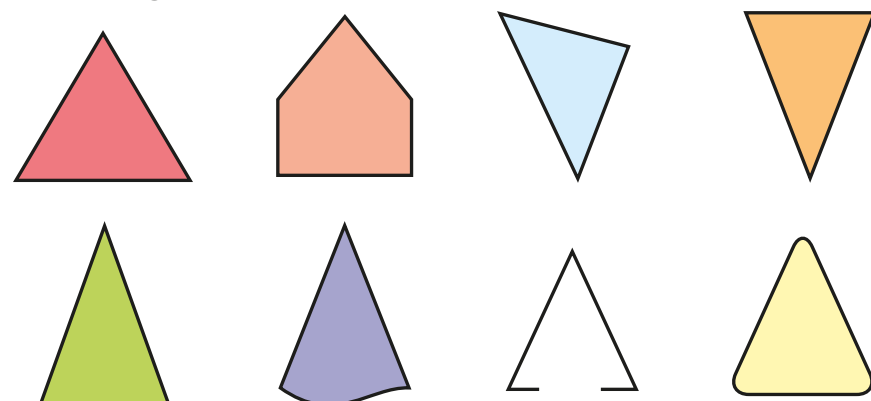


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Compare your definition with a partner's.

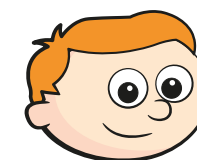


2 Tick the triangles.

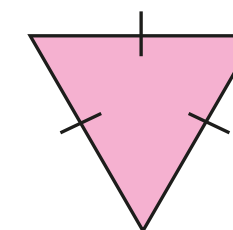


For any shapes you have not ticked, talk to a partner about why somebody might think they are triangles.

3 Ron is classifying triangles.



This is an upside down triangle.



a) Ron is incorrect.

Explain why.

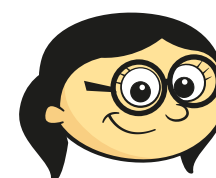
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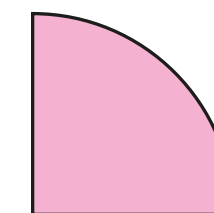
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b) What type of triangle is it? \_\_\_\_\_

4 Annie is identifying shapes.



This shape has 3 sides, so it is a triangle.



Do you agree with Annie? \_\_\_\_\_

Explain your answer.

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5 Match the type of triangle to the definition.

scalene

2 sides and  
2 angles equal

equilateral

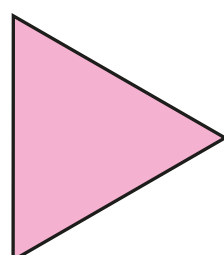
no sides or  
angles equal

isosceles

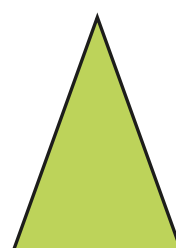
all sides and  
all angles equal

6 Label each triangle as either equilateral, isosceles or scalene.  
You will need to measure the side lengths.

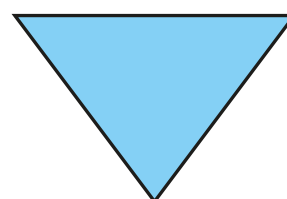
A



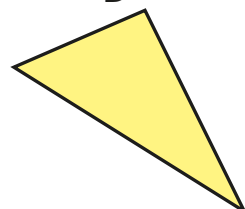
B



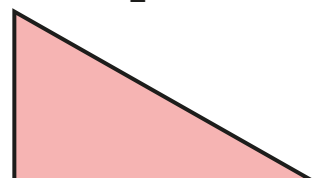
C



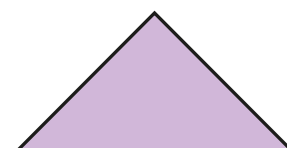
D



E



F

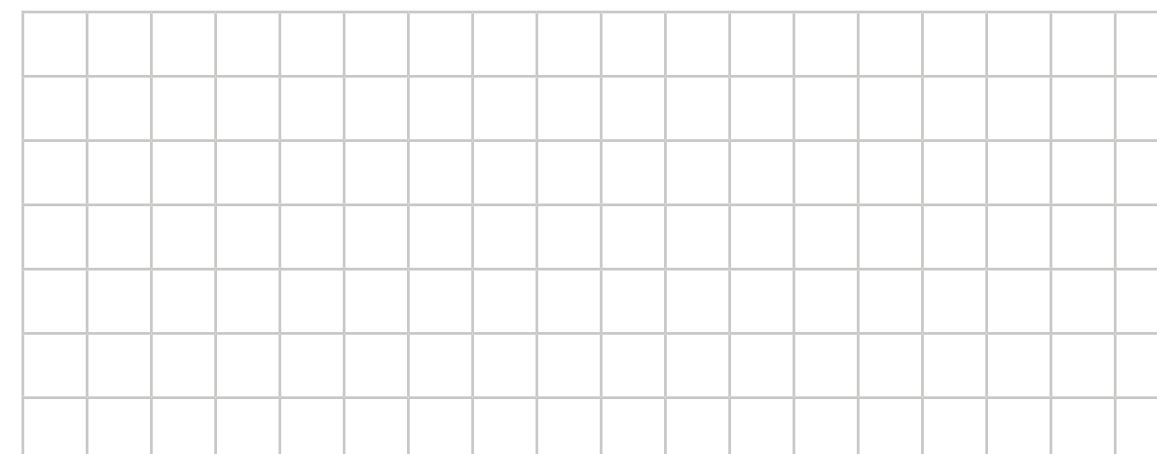


7 Draw each triangle in the grid.

a) isosceles

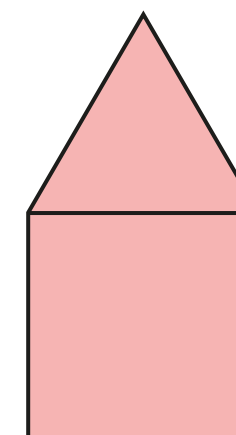
b) right-angled

c) scalene



Which triangle was hardest to draw?

8 The diagram shows an equilateral triangle and a square.  
The perimeter of the square is 100 cm.  
Work out the perimeter of the compound shape.



perimeter =  cm

# Quadrilaterals

1 Use the word bank to label each quadrilateral.

rhombus

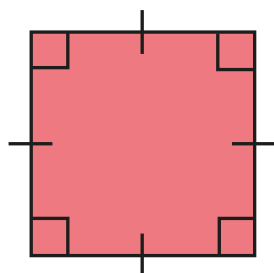
parallelogram

trapezium

rectangle

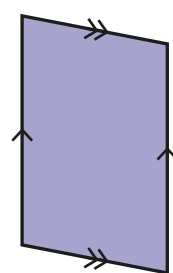
square

a)



\_\_\_\_\_

d)



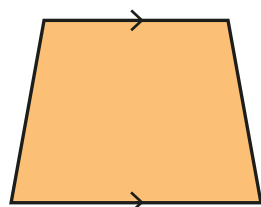
\_\_\_\_\_

b)



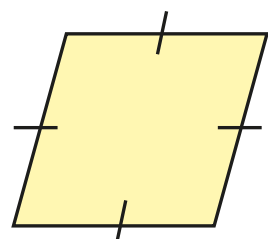
\_\_\_\_\_

e)



\_\_\_\_\_

c)



\_\_\_\_\_

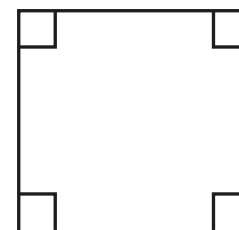
How did you know which shape was which?



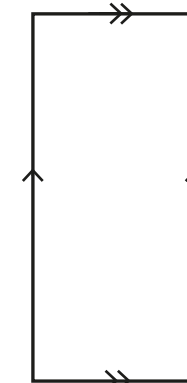
2

Here are some quadrilaterals.

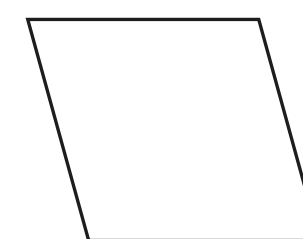
A



B



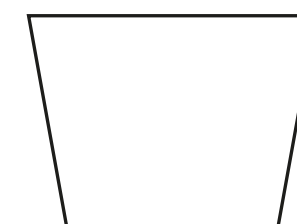
C



D



E



a) Mark any right angles on the shapes.  
One shape has been done for you.

b) Mark any pairs of parallel lines.  
One shape has been done for you.

c) Which shapes do not have any right angles?

\_\_\_\_\_

d) Which shapes have two pairs of parallel lines?

\_\_\_\_\_


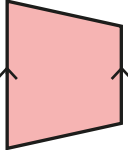
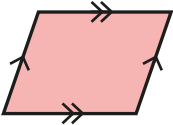
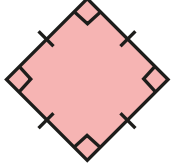
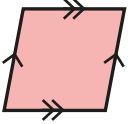
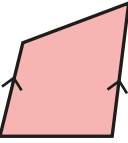
e) Which shapes have four equal sides?

\_\_\_\_\_

Compare answers with a partner.



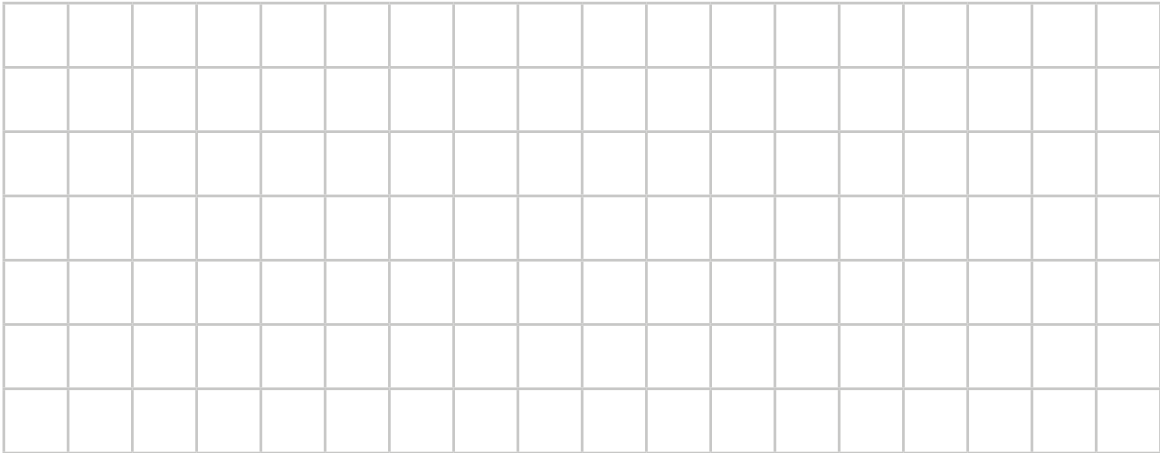
3 Complete the table.

Shape	Polygon?	Number of sides	Number of right angles	Number of pairs of parallel sides	Number of equal sides
	Yes	4	4	2	2 pairs
					2
					
					
					
					

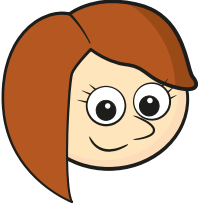
What is the same about all of the shapes?  
 What is different?

4 Draw the shapes on the grid.

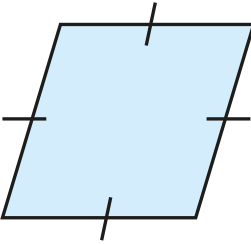
a) square                      b) trapezium                      c) parallelogram



5



This is a square because it has got 4 equal sides.



Do you agree with Rosie? \_\_\_\_\_  
 Explain your answer.

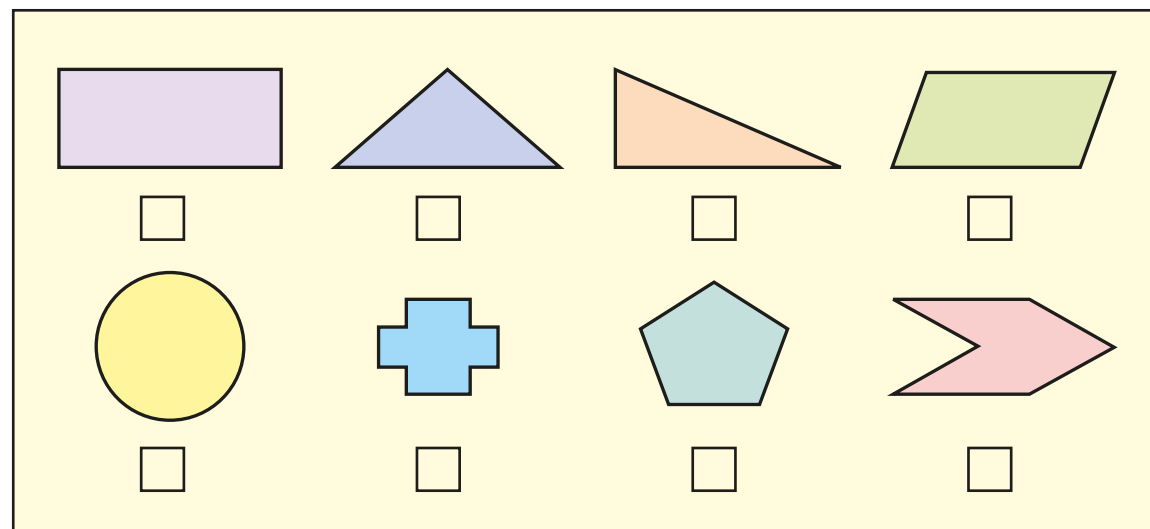
6 Complete this Frayer Model to describe a quadrilateral.

My definition	Key characteristics		
<div> <div>Quadrilateral</div> </div>			
		Example	Non-example

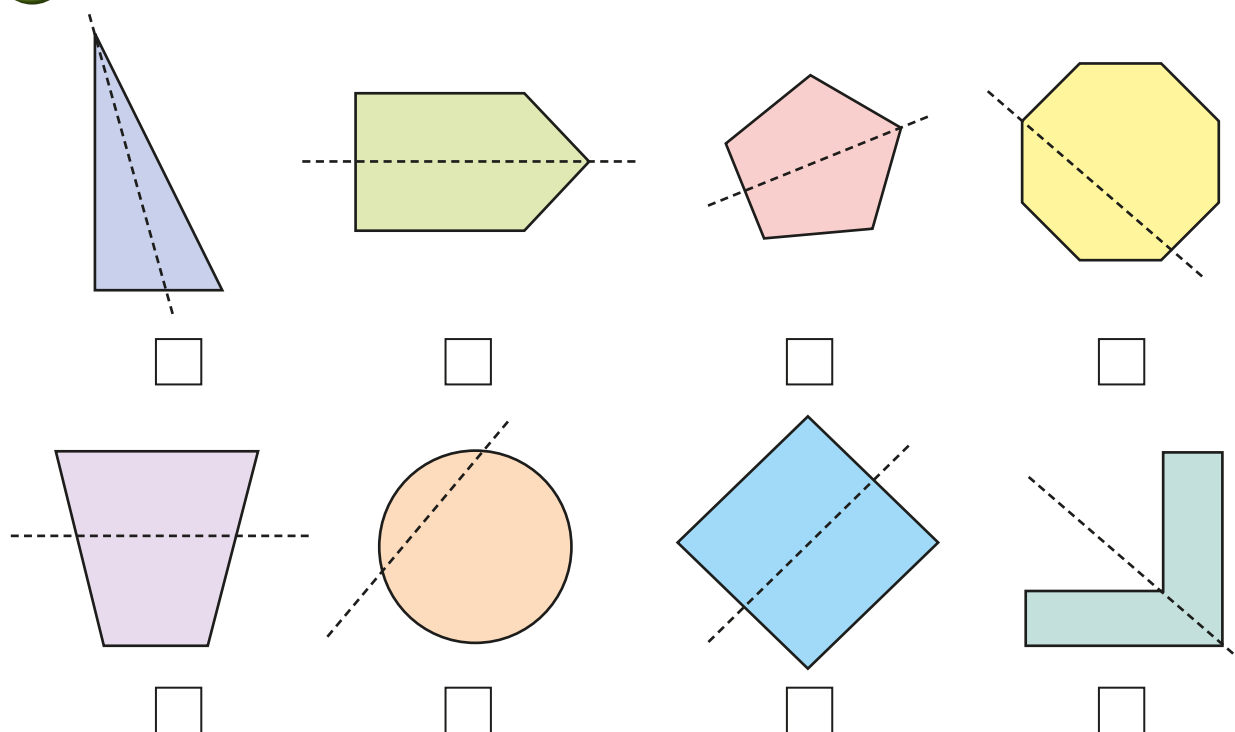


# Lines of symmetry

1 Tick the shapes that have at least one line of symmetry.



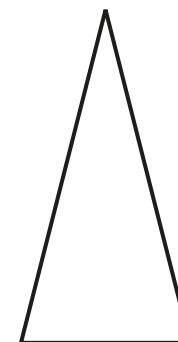
2 Tick the shapes that show a correct line of symmetry.



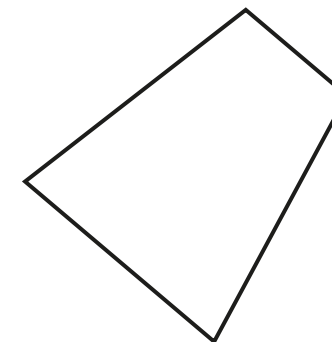
How did you know which shapes to tick?

3 Draw one line of symmetry on each shape.

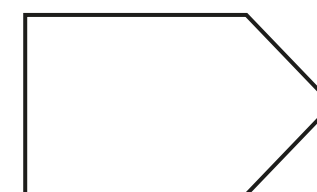
a)



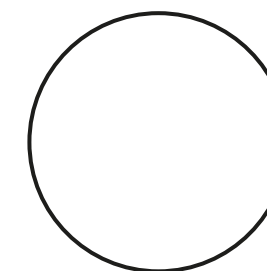
e)



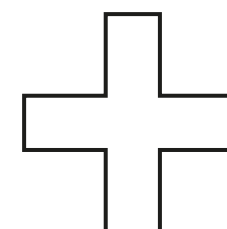
b)



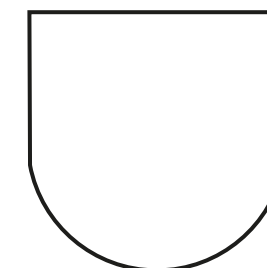
f)



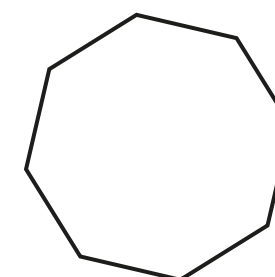
c)



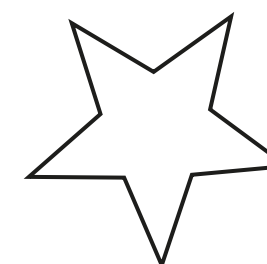
g)



d)



h)

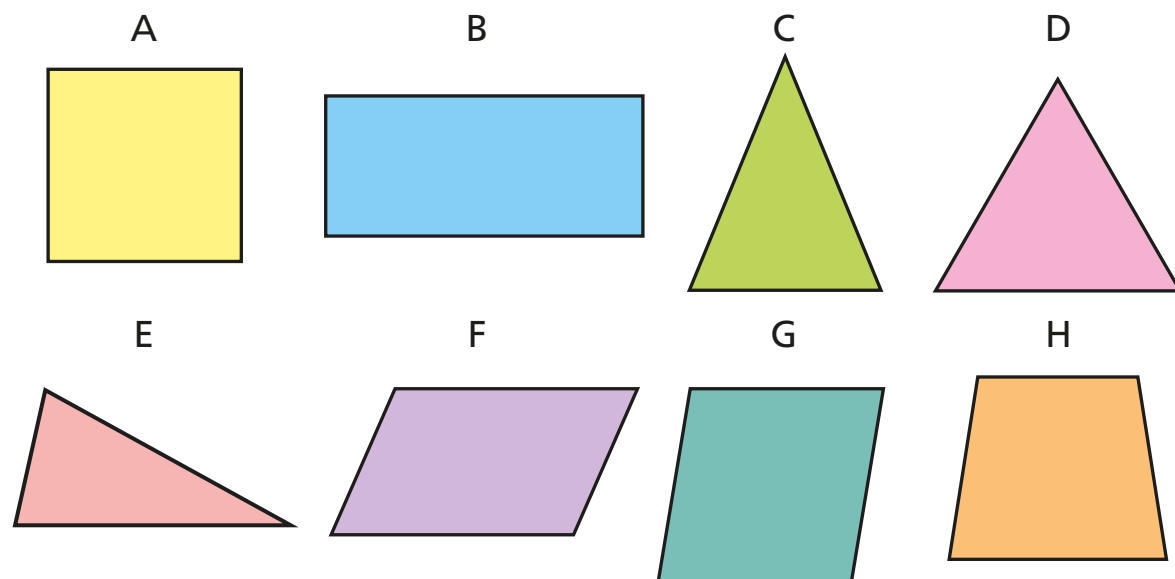


Is there more than one possible answer for each?



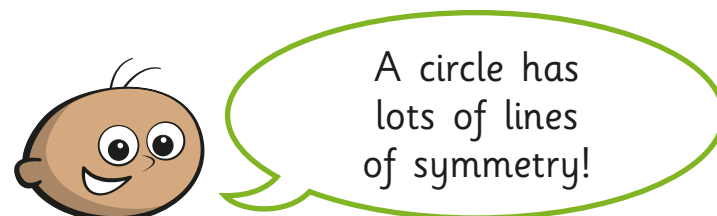
4 Sort the shapes into the table.

The first one has been done for you.



	1 line of symmetry	More than 1 line of symmetry	No lines of symmetry
Triangle			
Quadrilateral		A	

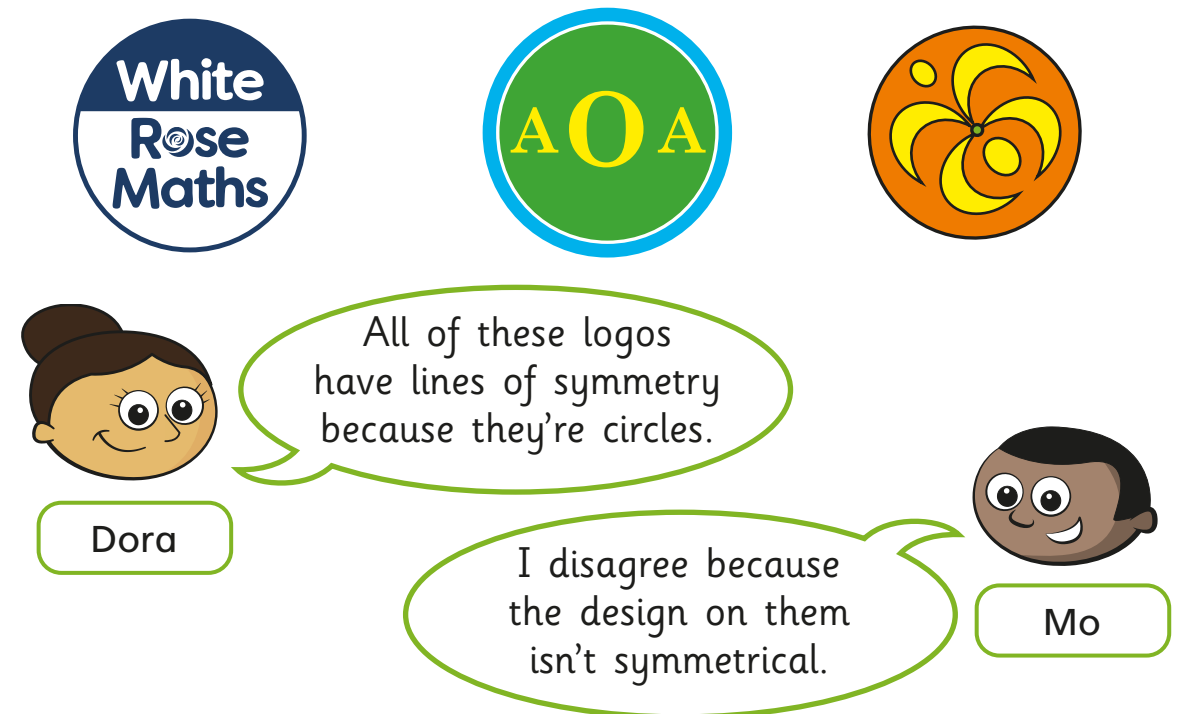
5 Tommy is folding a paper circle to find lines of symmetry.



Do you agree with Tommy? \_\_\_\_\_

Talk about it with a partner.

6 Here are 3 logos.



Who do you agree with? \_\_\_\_\_

Talk about it with a partner.

7 Shade a maximum of 8 squares to make a symmetrical shape.

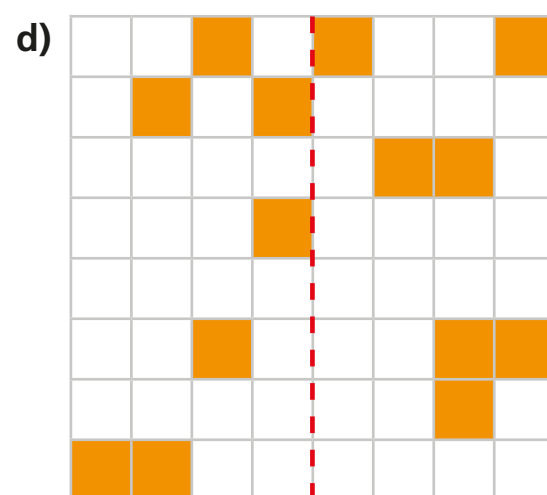
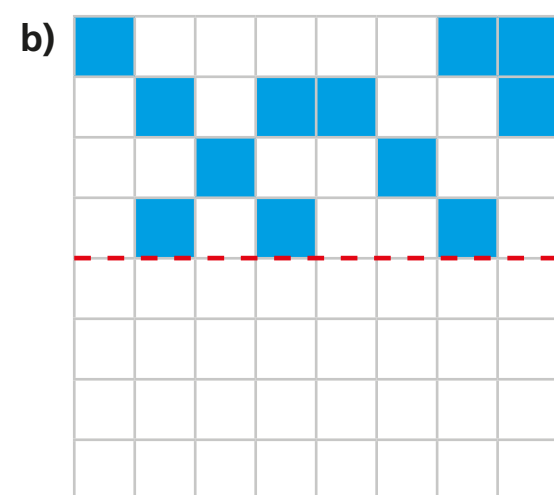
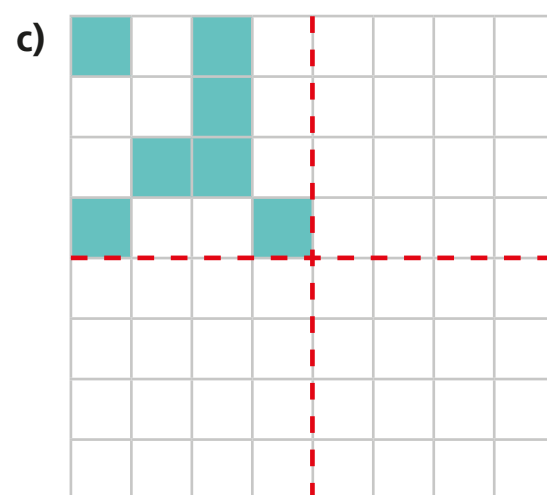
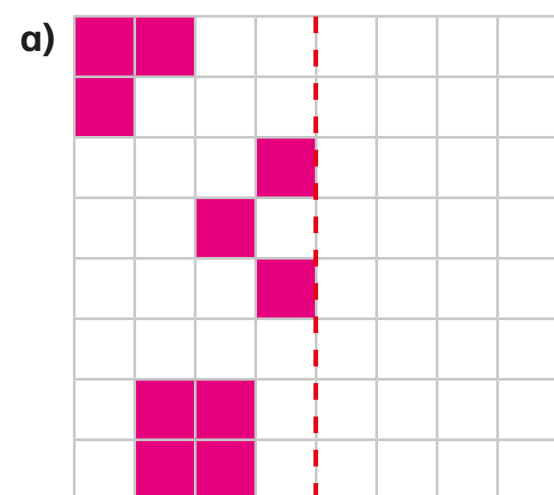


Compare answers with a partner. How many different shapes can you make?

# Complete a symmetric figure

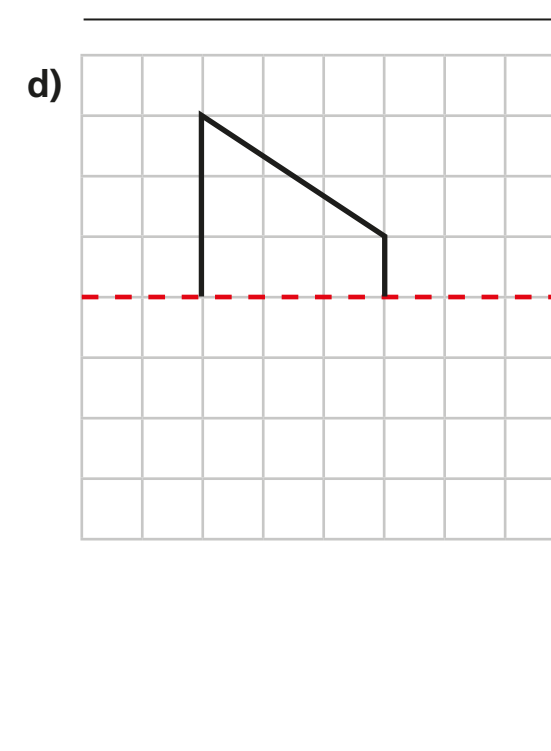
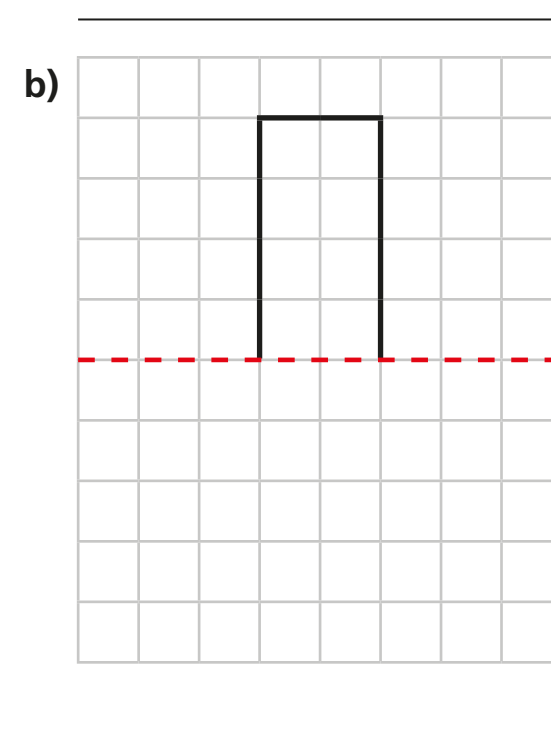
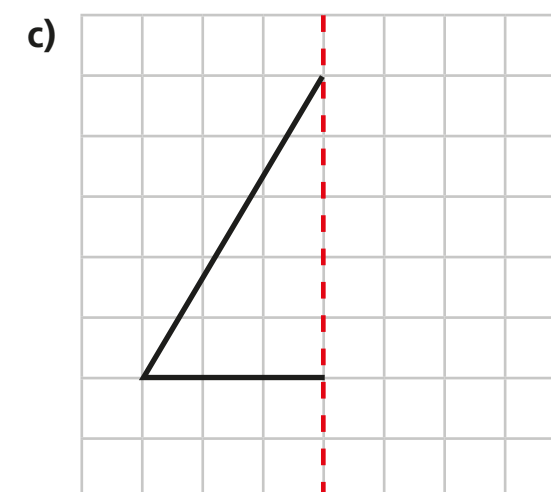
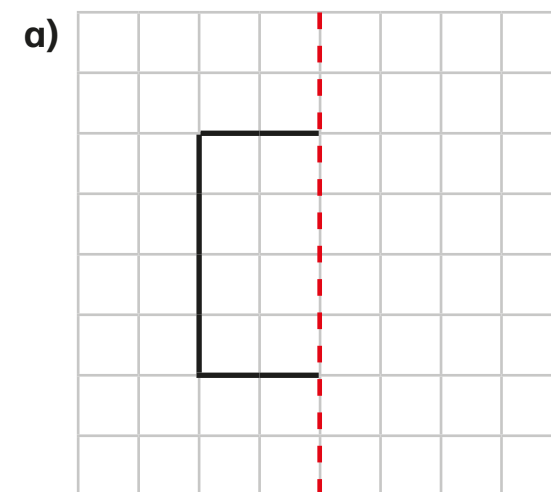


1 Shade squares to make the patterns symmetrical.

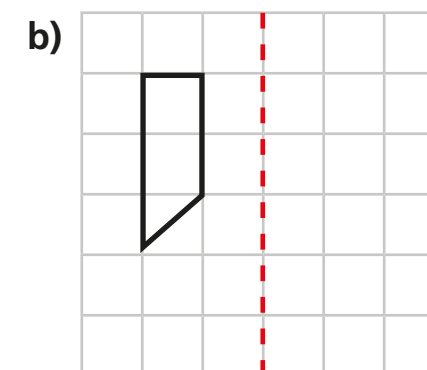
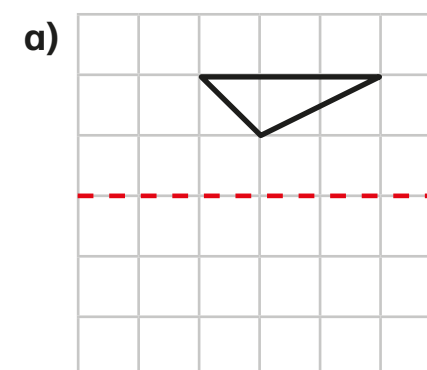


Compare methods with a partner.


2 Complete the shapes according to the lines of symmetry. Name each shape once you have drawn it.

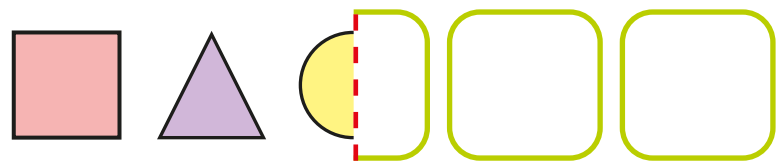


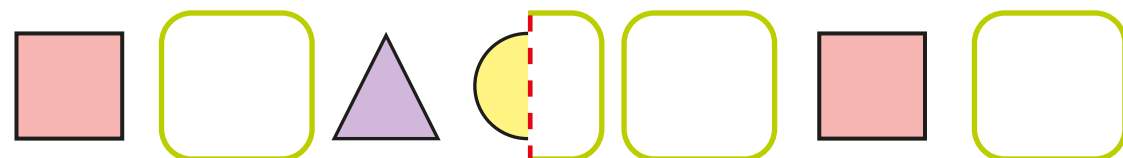
3 Reflect the shapes in the given mirror line.



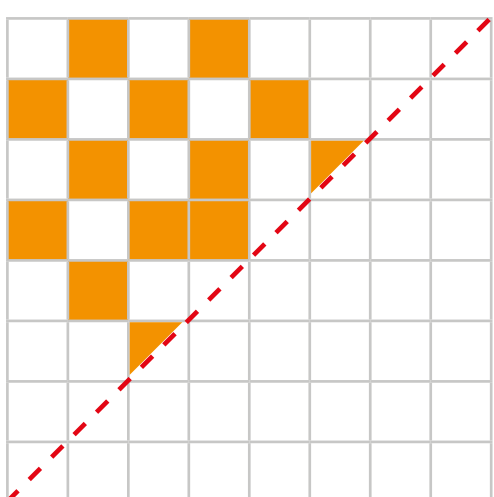
- 4 Each pattern is symmetrical around the mirror line.  
Complete the patterns.

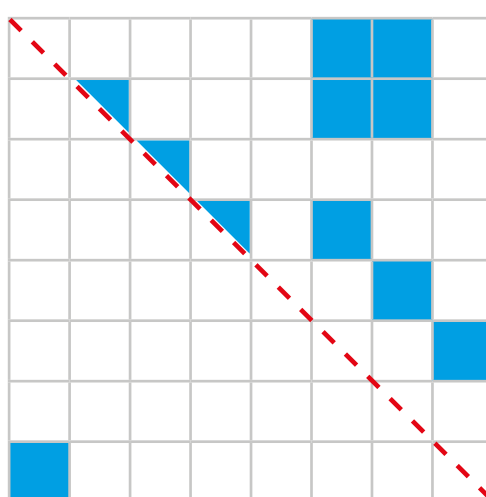
a) 

b) 

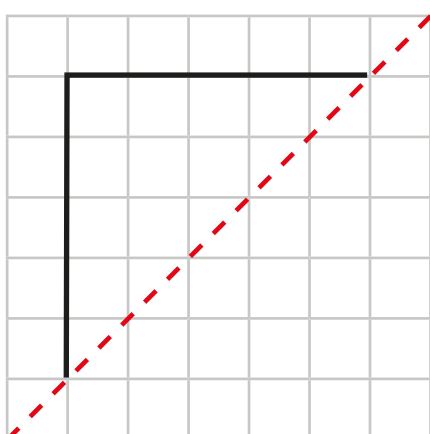
c) 

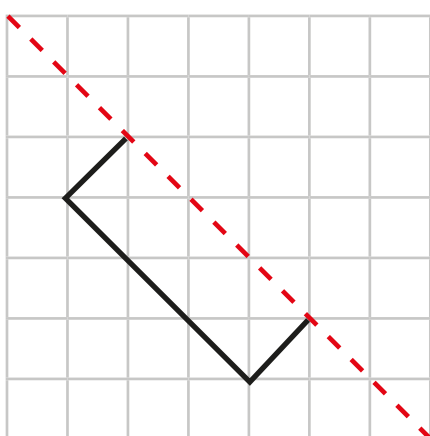
- 5 Shade squares to make the patterns symmetrical.

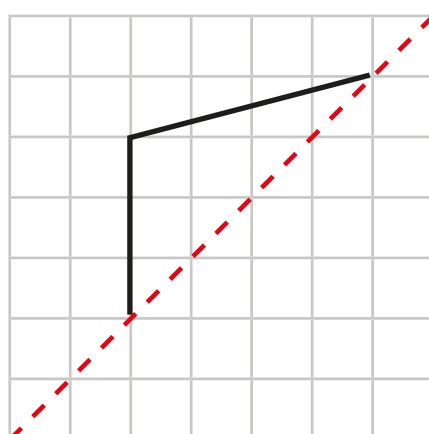
a) 

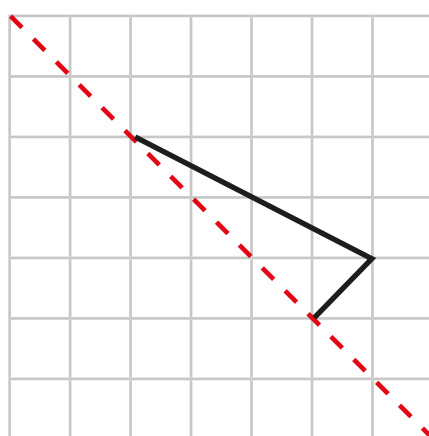
b) 

- 6 Complete the symmetric figures.

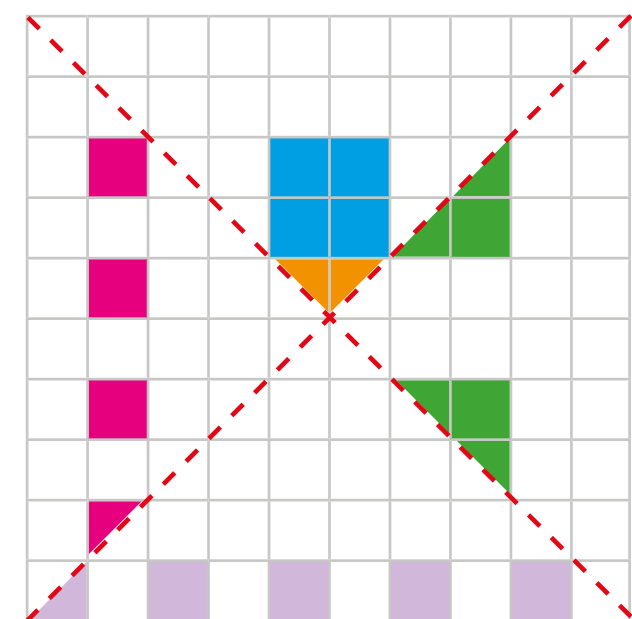
a) 

b) 

c) 

d) 

- 7 Complete the symmetric figure.



Create your own question like this for a partner.