Identify angles

1 Complete the sentences.

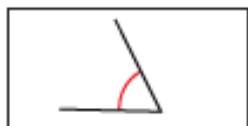Use the word bank to help you.

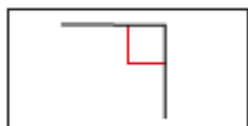| 90 | 180 | greater | less |

a) A right angle is ☐ degrees.

b) An acute angle is _____ than ☐ degrees.

c) An obtuse angle is _____ than ☐ degrees

but less than ☐ degrees.

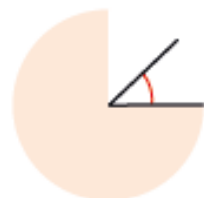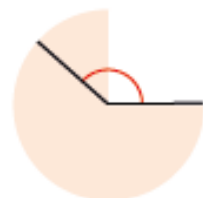**2** Match the angles to the labels.

right angle

acute angle

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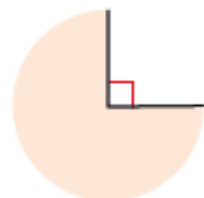
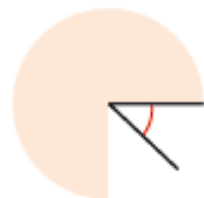**3** Label the angles: acute, obtuse or right angle.

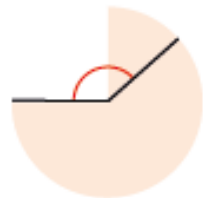a)

_____

b)

_____

c)

_____

d)

_____

e)

_____

f)

_____

4 Tick all the acute angles.

5 Tick all the obtuse angles.

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

a)

_____

b)

_____

c)

_____

d)

_____

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

a) 35° _____   d) 89° _____

b) 99° _____   e) 121° _____

c) 90° _____   f) 179° _____

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   B

a) Which angle is obtuse?   _____

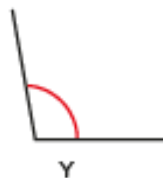b) Which angle is acute?   _____

How do you know?

2 Here are two angles.

X   Y

a) What type of angle is angle X?   _____

b) What type of angle is angle Y?   _____

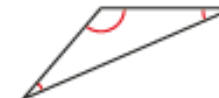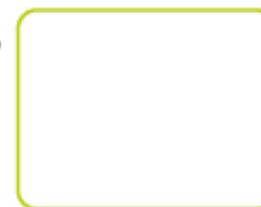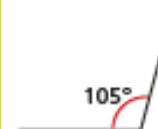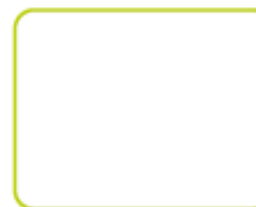c) Which angle is smaller?   _____

How do you know?

3 Circle the greatest angle in each diagram.

4 Here is an angle.

105°

a) Draw a smaller angle than 105° in the box on the left.

b) Draw a greater angle than 105° in the box on the right.
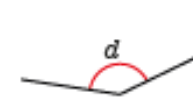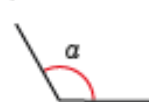
c) Is this statement true or false?

The angles are in ascending order of size.

_____

Explain your answer.

5 Order the angles from greatest to smallest.

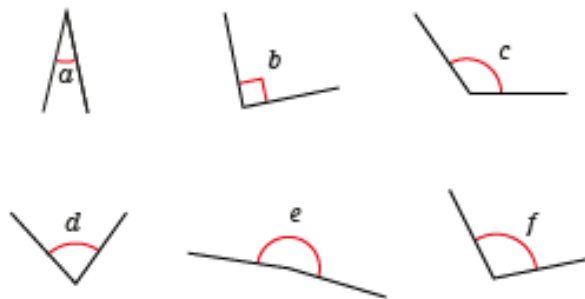a)

a   b   c   d
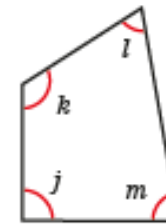
_____

b)

c)

6 Compare and order the angles from smallest to greatest.

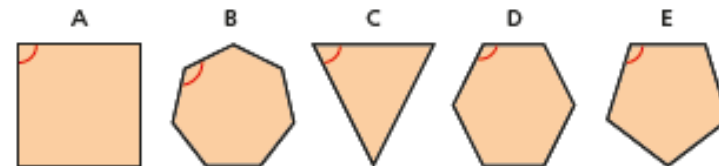**7** Four angles are labelled in the quadrilateral.

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.
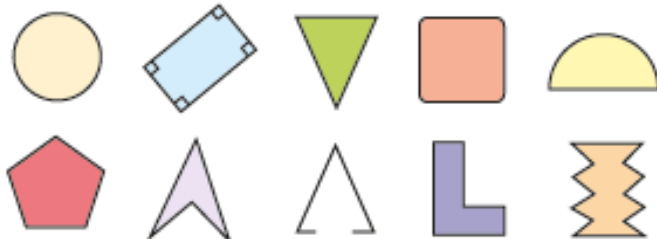
_____

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?

1 Here are some shapes.

a) Tick the polygons.

b) Talk to a partner about the shapes you have not ticked. Why are they not polygons?

c) Write a definition of a polygon.

_____

_____

Compare your definition with a partner's.
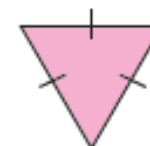
2 Tick the triangles.

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.

_____

_____

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.

_____

_____

5 Match the type of triangle to the definition.
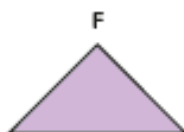
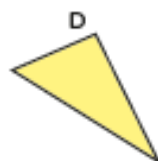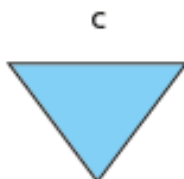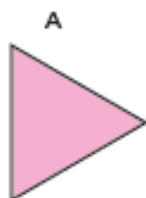| scalene | | 2 sides and 2 angles equal |
| equilateral | | no sides or angles equal |
| isosceles | | all sides and all angles equal |

6 Label each triangle as either equilateral, isosceles or scalene.

You will need to measure the side lengths.

A

B

C

_____   _____   _____
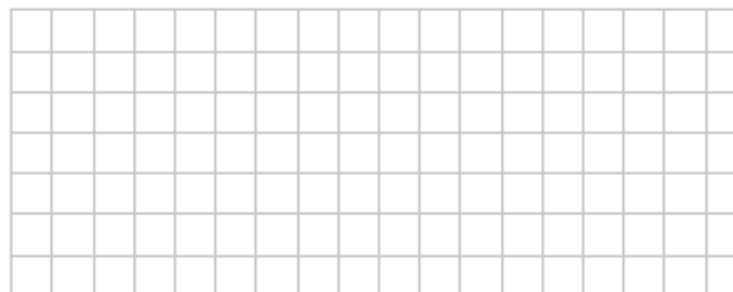
D

E

F

_____   _____   _____

7 Draw each triangle in the grid.

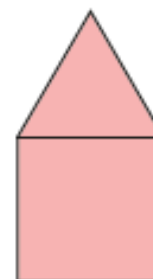a) isosceles   b) right-angled   c) scalene

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

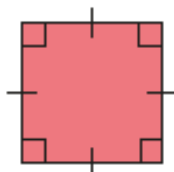**1** Use the word bank to label each quadrilateral.

rhombus   parallelogram   trapezium
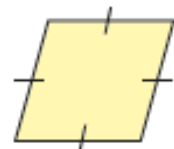
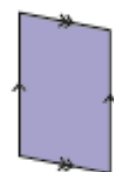rectangle   square

a)

d)
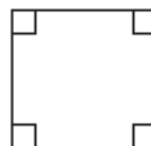
_____   _____

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?

_____
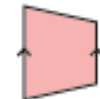
d) Which shapes have two pairs of parallel lines?

_____

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

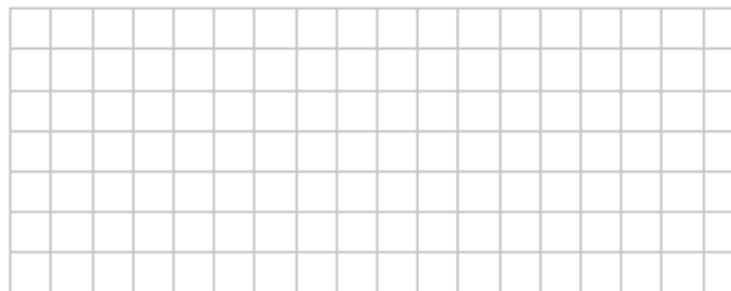What is the same about all of the shapes?

What is different?

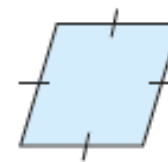**4** Draw the shapes on the grid.

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
Quadrilateral	
Example	Non-example