Triangles

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.
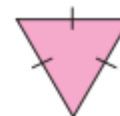
2 Tick the triangles.

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
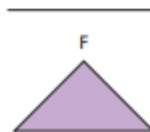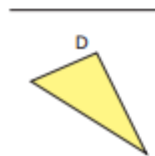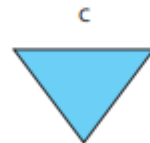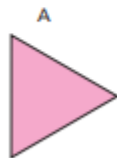
2 sides and
2 angles equal

equilateral

no sides or
angles equal

isosceles

all sides and
all angles equal

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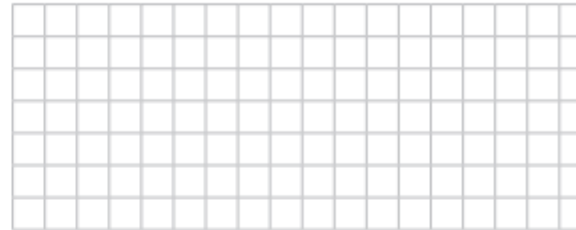You will need to measure the side lengths.

A

B

C

D

E

F

7 Draw each triangle in the grid.

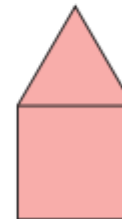a) isosceles   b) right-angled   c) scalene

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

Answers below

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.

A closed shape made up of straight sides

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.

A triangle cannot be upside down.

b) What type of triangle is it? __equilateral__

4 Annie is identifying shapes.

This shape has 3 sides, so it is a triangle.
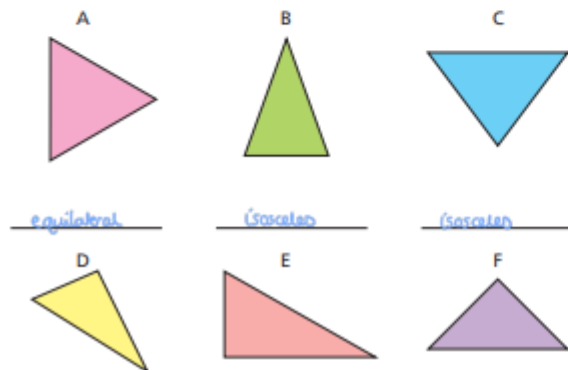
Do you agree with Annie? __No__

Explain your answer.

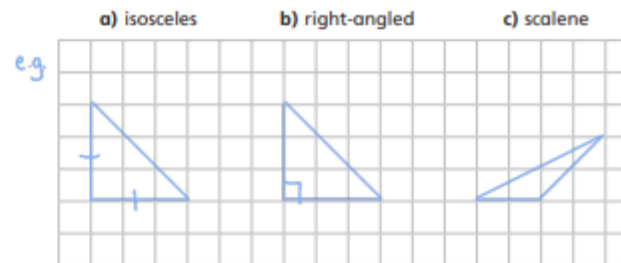A triangle has three straight sides this shape does not

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

equilateral   isosceles   isosceles

D   E   F

7 Draw each triangle in the grid.

a) isosceles   b) right-angled   c) scalene
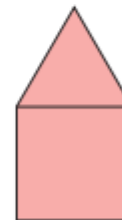
e.g.

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 = 125 cm