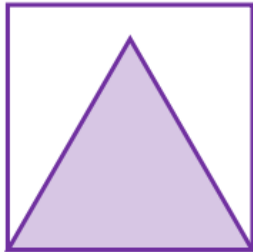**1.** Here is a square.
Inside the square is an equilateral triangle.
The perimeter of the square is 60 cm.
Find the perimeter of the triangle.

2.

Eva

If I use 6 straws to make a triangle, I can only make an equilateral triangle.

Investigate whether Eva is correct.

Draw two more sides to create:
- An equilateral triangle
- A scalene triangle
- An isosceles triangle

Which is the hardest to draw?

3. Complete each of the boxes in the table with a different quadrilateral.

	4 equal sides	2 pairs of equal sides	1 pair of parallel sides
4 right angles			
No right angles			

Which box cannot be completed? Explain why.

4.

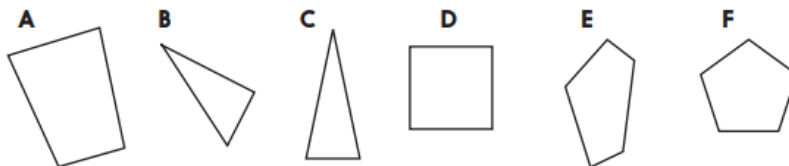## Always, sometimes or never true?

- A regular polygon has equal sides but not equal angles.
- A triangle is a regular polygon.
- A rhombus is a regular polygon.
- The number of angles is the same as the number of sides in any polygon.

5.

Look at these shapes.

A   B   C   D   E   F

Match the shapes to each description below:

A triangle: _____ and _____
A quadrilateral: _____ and _____
A pentagon: _____ and _____
A symmetrical polygon: _____, _____ and _____
A regular polygon: _____ and _____
An irregular polygon: _____, _____, _____ and _____

Properties of polygons
Sheet 1

Complete this table by writing a tick in each box that is 'true'.

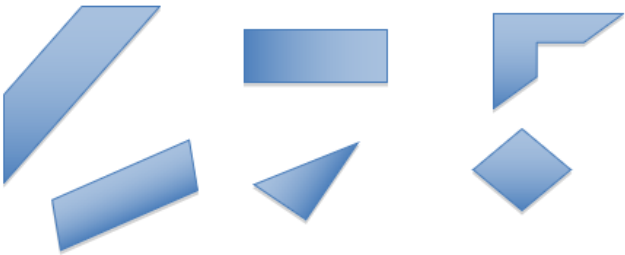|	square	equilateral triangle	irregular pentagon	regular hexagon	regular pentagon	octagon
all sides the same length						
one pair of parallel sides						
more than 1 pair of parallel sides						
5 sides						
more than 4 sides						
less than 5 vertices						
no perpendicular sides						

6. Was there a column that was difficult to complete? Why?

Is this a polygon?

Draw any polygon and list five of its properties.

_____

Which of the following shapes are quadrilaterals?

7. _____