

TEACHER'S NAME:

NAME:

CLASS:

**9.1 POLYGONS****Notes**

- Number of vertices= number of sides
- 

Number of sides	Polygons
3	Triangle
4	Quadrilaterals
5	Pentagon
6	Hexagon
7	Heptagon
8	Octagon
9	Nonagon
10	Decagon

**A Match the following polygons with their names.**

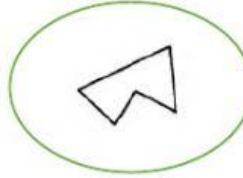
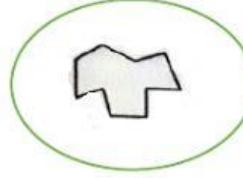
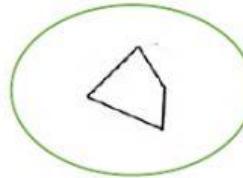
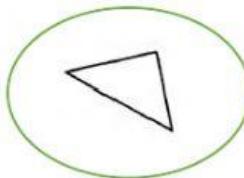
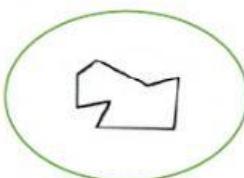
Triangle

Decagon

Pentagon

Octagon

Quadrilaterals

**B Match the following polygon with its number of sides.**

Heptagon

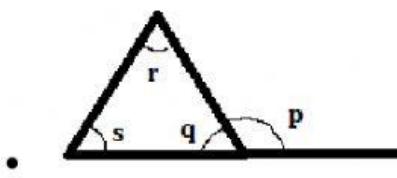
5

Pentagon

7

## 9.2 PROPERTIES OF TRIANGLES AND THE INTERIOR AND EXTERIOR ANGLES OF TRIANGLES

### Notes



- The sum of the interior angles,  $q = r + s = 180^{\circ}$
- The sum of adjacent angles,  $p + q = 180^{\circ}$
- The exterior angle is the sum of the opposite interior angles,  $p = r + s$
- 

### C Match the following triangle with its geometric properties.

All interior angles are  $60^{\circ}$

Equilateral triangle

The lengths of all sides are not the same

All interior angles are different

Isosceles triangle

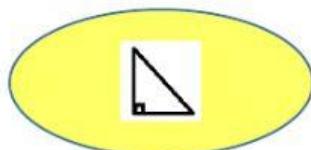
The lengths of all sides are the same

The two interior angles have the same value

Scalene Triangle

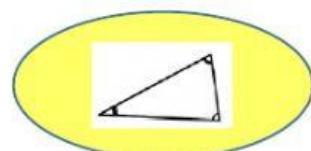
The length of the two sides is the same

### D Match the following triangles with their names and geometric properties.



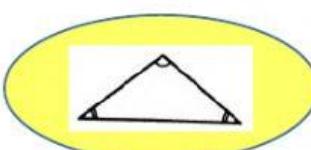
Obtuse-angled triangle

All angles in a triangle are acute angles



Acute-angled triangle

One of the angle in the triangles is obtuse angle



Right-angles triangle

One of the in the triangles is right angle

E Find the value of  $x$  in each of the following triangles.

Drag the answer to the space provided.

110°

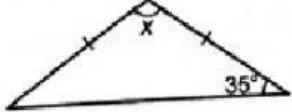
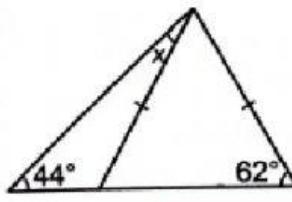
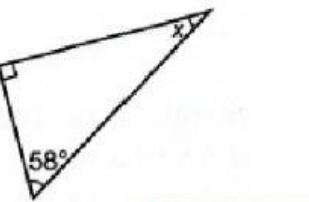
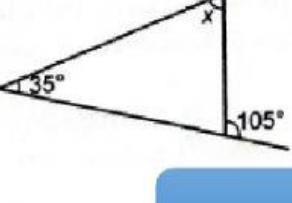
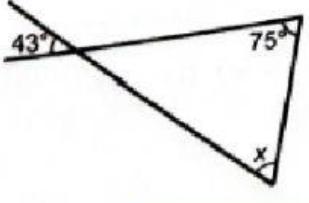
70°

89°

32°

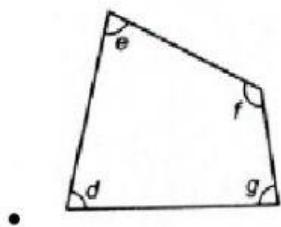
18°

62°

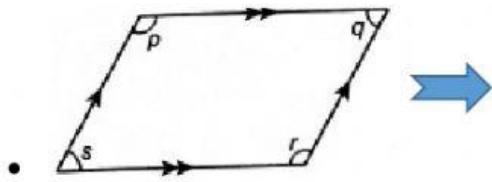
a		d	
b		e	
c		f	

### 9.3 PROPERTIES OF QUADRILATERALS AND THE INTERIOR AND EXTERIOR ANGLES OF QUADRILATERALS

#### Notes



The sum of the interior angles for a quadrilateral is 360°



The opposite angles of a parallelogram and a rhombus are the same

**F Find the value of x in each of the following triangles.**

Drag the answer to the space provided

123°

50°

63°

42°

103°

36°

<p><b>a</b></p>	<p><b>d</b></p>
<p><b>b</b></p>	<p><b>e</b></p>
<p><b>c</b></p>	<p><b>f</b></p>