

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.

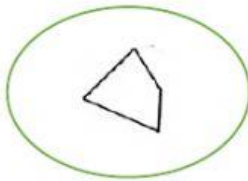
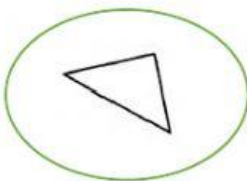
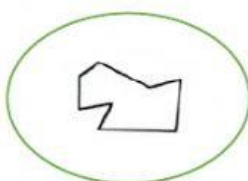
Triangle

Decagon

Pentagon

Octagon

Quadrilaterals



B Match the following polygon with its number of sides.

Heptagon

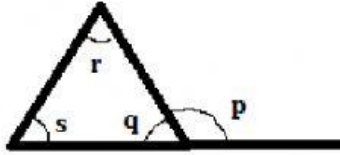
5

Pentagon

7




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

### Notes



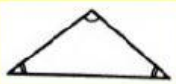


- The sum of the interior angles,  $q = r + s = 180^\circ$
- The sum of adjacent angles,  $p + q = 180^\circ$
- The exterior angle is the sum of the opposite interior angles,  $p = r + s$
- 

### 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.

	Obtused -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°

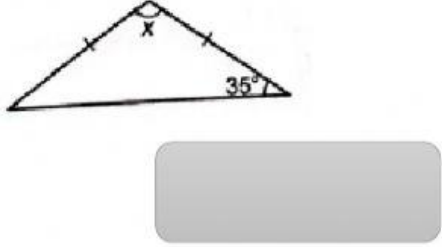
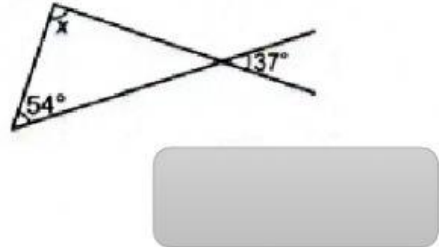
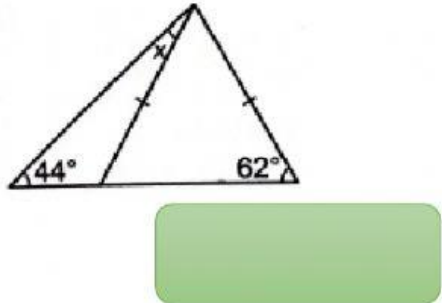
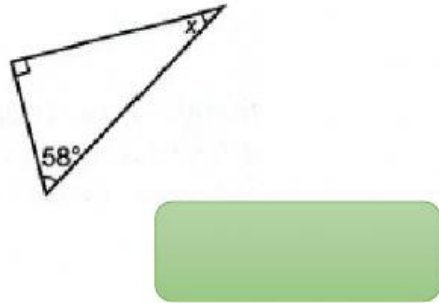
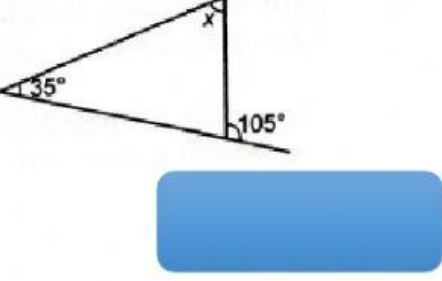
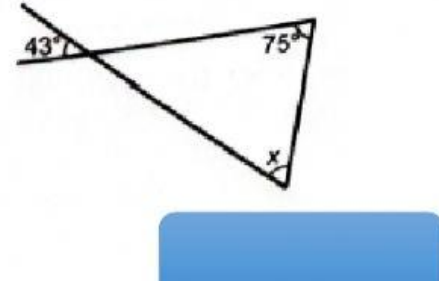
70°

89°

32°

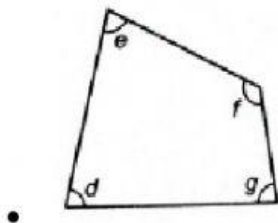
18°

62°

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

### 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> <div style="background-color: #42a5f5; height: 40px; width: 150px; margin-top: 10px;"></div>	<p><b>d</b></p> <div style="background-color: #42a5f5; height: 40px; width: 150px; margin-top: 10px;"></div>
<p><b>b</b></p> <div style="background-color: #ff9800; height: 40px; width: 150px; margin-top: 10px;"></div>	<p><b>e</b></p> <div style="background-color: #ff9800; height: 40px; width: 150px; margin-top: 10px;"></div>
<p><b>c</b></p> <div style="background-color: #ffeb3b; height: 40px; width: 150px; margin-top: 10px;"></div>	<p><b>f</b></p> <div style="background-color: #ffeb3b; height: 40px; width: 150px; margin-top: 10px;"></div>