## **Quadrilaterals**

A closed figure formed by the four straight lines are called quadrilaterals. There are different types of quadrilaterals. Here are some examples

(1) A kite:- A kite has 2 pairs of adjacent sides equal. 1 pair of offsite angles equal. Diagonals cut at 90°. 1 line of symmetry.	
(2) An <b>Arrowhead</b> :- It has: 2 pairs of adjacent sides equal 1 line of symmetry	
(3)A rhombus: has: All sides equal Opposite sides parallel Opposite angles equal Adjacent angles are supplementary Diagonals that bisect at 90°	
(4) An isosceles Trapezium: has 1 pair of parallel lines. 1 line of symmetry.	
(5) <b>Parallelogram</b> : Opposite sides are parallel and equal. No lines of symmetry and the rotational symmetry of order 2.	

Properties of Quadrilaterals: Sum of all four interior angles of a quadrilateral is 360 degree.

## **Exercise**

1) Parallelogram

Define the following quadrilaterals.

2) Square				

3)	Rectangle
υ,	. tootag.c

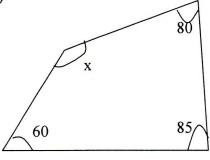
4) Isosceles trapeziun	4)	Isoscel	es t	rape	ziun	n
------------------------	----	---------	------	------	------	---

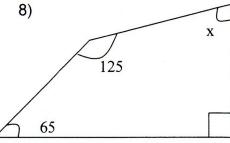
## 5) Rhombus

6) Write number of lines of reflective symmetry and rotational symmetry of the following quadrilaterals

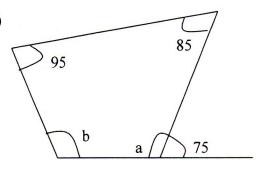
Quadrilateral	Reflective Symmetry	Rotational Symmetry
a) Parallelogram		
b) Square		
c) Rectangle		
d) Isosceles trapezium		
e) Rhombus		
f) Kite		

Find the unknown angle of the following quadrilaterals.

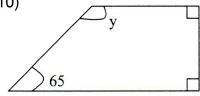




9)



10)



a = \_\_\_\_, b= \_\_\_