

**QUESTION BANK GRADE -8 SUB: MATHEMATICS Understanding Quadrilaterals** CH- 4-1) What is the name of regular polygon with 4 sides? a. Equilateral triangle b. square c. rectangle d. kite 2. How many sides a regular polygon will have if its exterior angles are of 30°? a. 12 d. 5 b. 10 3. What is the name of regular polygon of 8 sides? b. pentagon a. Square c. hexagon d. octagon 4. How many diagonals does a quadrilateral have? a. 1 b. 2 c. 3 d. 4 5) In a parallelogram opposite angles are? b. half d. none of these a. Equal c. doubled. 6) In a rectangle all angles are? a. 45 ° b. 90 ° c. 100 ° d. 180 ° 7). In a rectangle both the diagonals are? b. unequal c. sometimes equal, sometimes unequal d. none of these a. Equal **FILL IN THE BLANKS**: i). A curve which does not cut itself is called a/an..... ii) A closed curve is called ......., if it does not pass through one point more than once. iii) A pentagon has..... interior angles .

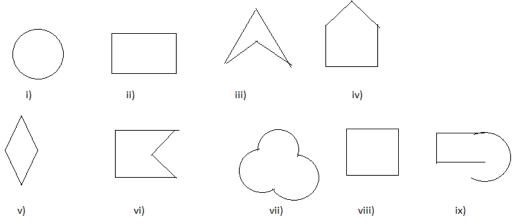
iv) A parallelogram in which all sides are equal is called .... ....

## Write TRUE/FALSE:

- i) The sum of all angles of a quadrilateral is 180  $^{\rm 0}$  .
- ii) A parallelogram in which all sides are equal is called square.
- iii)Every rectangle is a parallelogram.
- iv)Every parallelogram is a rectangle.

## **ANSWER THE FOLLOWING QUESTIONS**

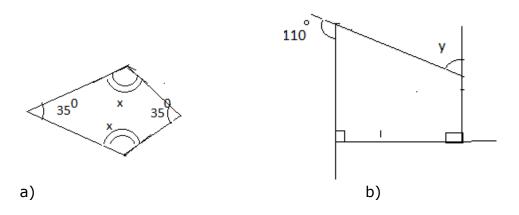
1) Observe the following pattern and classify each of them on the basis of



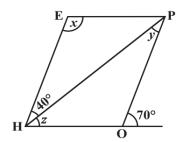
- a) open curve
- b) simple closed curve
- c) polygon

- d) convex polygon
- e) concave polygon

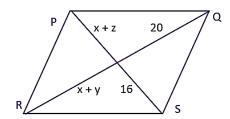
2) Find the values of the unknown variable.



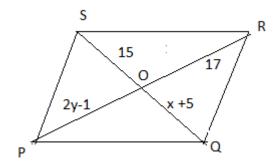
- 3) How many sides does a regular polygon have if the measure of its exterior angle is 36°?
- 4) ABCD is a parallelogram. Find the angle if x, y and z.



5) In a parallelogram PQRS find the value of x and y.



6) In parallelogram PQRS, find the value of x and y



- 7) In a parallelogram PQRS,  $\angle P:\angle Q=1:2$  Then find  $\angle Q=?$
- 8) ABCD is a trapezium with AB//CD .If < A = 106  $^{\rm 0}$  and < B = 122  $^{\rm 0}$  . Find the measures of <C and < D.
- 9)The angles of a quadrilateral are in the following ratio. Find the measure of the four angles.
  - a) 3:5:7:9

b) 2:2:3:5

10) Find the number of a regular polygons if each interior angle is:

156 <sup>0</sup>

- 11)One angle of a parallelogram is  $30^{\circ}$  more than its adjacent angles. How much each angle measure?
- 12) Draw a rhombus with one of its angles equal to  $80^{\circ}$  and its sides equal to 6.5 cm.