

Classify each of them on the basis of the following.

- (a) Simple curve
- (b) Simple closed curve

(c) Polygon

- (d) Convex polygon
- (e) Concave polygon
- 2. Write the name of polygon and draw sample figure in following table as

given example:

| Number of sides | Name of Polygon | Shape of Polygon |
|-----------------|-----------------|------------------|
| or Vertices (n) |                 |                  |
| 3               | Triangle        | $\square$        |
| 4               |                 |                  |
| 6               |                 |                  |
| 7               |                 |                  |
| 8               |                 |                  |
| 9               |                 |                  |

3. Find *x* in the following figures.





- 4. Find the measure of each exterior angle of a regular polygon of
  - (i) 9 sides (ii) 15 sides
- 5. How many sides does a regular polygon have if the measure of an exterior angle is 24°?
- Draw shape and fill the number of diagonals for given polygons in following table:(Using diagonal formula)

| Name of Polygon | Number of sides | Shape | Number of |
|-----------------|-----------------|-------|-----------|
|                 | (n)             |       | Diagonals |
| Rectangle       | 4               |       | 2         |
| Hexagon         |                 |       |           |
| Trapezium       |                 |       |           |
| Pentagon        |                 |       |           |
| Parallelogram   |                 |       |           |
| Triangle        |                 |       |           |