

# **St. Andrews Scots Sr. Sec. School**

**9th Avenue, I.P. Extension, Patparganj, Delhi -110092**

**Session: 2025-2026**

**Class: IV**

**Subject: Mathematics**

**Topic: Unit -6 (Geometrical Concepts)**

Warm up (pg-92)

Geometrical concepts (pg-93)

Ex-1 Q-1,2,4 (Book)

Q-3,5 (Notebook)

Polygons and types of Polygons (pg-95,96)

Ex -2 Q.1, Q.2 (Book)

Angles and types of angles (pg-98,99)

Ex -3 Q.1,Q.2, Q.3, Q.4(Book)

Types of triangles (pg-101,102)

Ex-4 Q.1,Q.2 (Book)




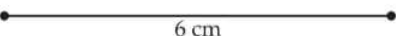
Q.3 (Notebook)

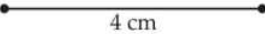
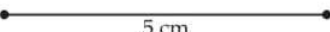
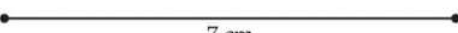
Circle, it's center, radius, diameter, chord, circumference (pg-103,104)

Ex-5 Q.1,Q.2 (Book)

Worksheet

**Exercise-1**

- (iii) A line segment has 2 end points.
  - (iii) There are 9 line segments in the given figure.
  - (ii) A ray has one initial point.  
So, the given Statement I is false.  
A line has indefinite length.  
So, the given Statement II is true.
- Line MN
  - Line segment ST
  - Ray AB
- 
  - 
  - 
- 2 cm
  - 8 cm
- 

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- 
- 

**Critical Thinking**

No, because the polygon is formed with three or more line segments.

**Exercise-2**

- A simple closed figure formed with three or more straight line segments is called a polygon.  
So, the figures (b), (d), (e), (h), (i) and (k) are polygons.
- False
  - True
  - True
  - False
  - True
  - False
  - True

**Puzzle**




There are 47 triangles in the given figure.

**Exercise-3**

- $\angle ABC$
  - $\angle MNP$
  - $\angle XYZ$
- arms -  $\overrightarrow{QP}$  and  $\overrightarrow{QR}$ , vertex - Q
  - arms -  $\overrightarrow{BC}$  and  $\overrightarrow{BA}$ , vertex - B
  - arms -  $\overrightarrow{YX}$  and  $\overrightarrow{YZ}$ , vertex - Y
- P and Z
  - X and Y
- A:right B:right C:acute D:straight E:obtuse

**Exercise-4**

- Sides: XY, YZ, ZX, Vertices: X, Y, Z Angles:  $\angle XYZ$ ,  $\angle YZX$ ,  $\angle ZXY$
- In  $\triangle ABC$ ,  $AB = BC = CA$  (all sides are equal)  
Thus,  $\triangle ABC$  is an equilateral triangle.
  - In  $\triangle PQR$ ,  $PQ \neq RP \neq QR$  (all sides have different lengths)  
Thus,  $\triangle PQR$  is a scalene triangle.
  - In  $\triangle XYZ$ ,  $XY = ZX$  (two sides are equal)  
Thus,  $\triangle XYZ$  is an isosceles triangle.

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Scalene triangle

Isosceles triangle

Equilateral triangle

### Exercise-5

1. (a) (ii) Diameter =  $2 \times \text{radius} = 2 \times 9 \text{ cm} = 18 \text{ cm}$   
(b) (iii) Radius =  $\frac{\text{diameter}}{2} = \frac{2 \text{ m}}{2} = 1 \text{ m}$   
(c) (iii) BC is the diameter of the circle.
2. (a) O                      (b) OA, OB and OC                      (c) AB

