

St. Andrews Scots Sr. Sec. School

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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)

Angels and types of angels (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

Lesson-6 : Basic Geometrical Concepts

Exercise-1

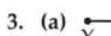
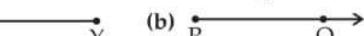
1. (a) (iii) A line segment has 2 end points.
(b) (iii) There are 9 line segments in the given figure.
(c) (ii) A ray has one initial point.

So, the given Statement I is false.

A line has indefinite length.

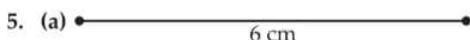
So, the given Statement II is true.

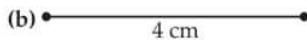
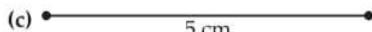
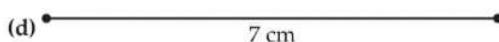
2. (a) Line MN (b) Line segment ST (c) Ray AB

3. (a)  (b) 

4. (c) 

4. (a) 2 cm (b) 8 cm

5. (a) 

- (b) 
- (c) 
- (d) 

Critical Thinking

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

Exercise-2

1. 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.
2. (a) False (b) True (c) True (d) False
(e) True (f) False (g) True

Puzzle

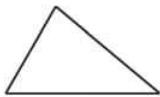
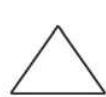
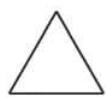
There are 47 triangles in the given figure.

Exercise-3

1. (a) $\angle ABC$ (b) $\angle MNP$ (c) $\angle XYZ$
2. (a) arms - \overrightarrow{QP} and \overrightarrow{QR} , vertex - Q
(b) arms - \overrightarrow{BC} and \overrightarrow{BA} , vertex - B
(c) arms - \overrightarrow{YX} and \overrightarrow{YZ} , vertex - Y
3. (a) P and Z (b) X and Y
4. A : right B : right C : acute D : straight E : obtuse

Exercise-4

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

3. 
Scalene triangle
- 
Isosceles triangle
- 
Equilateral triangle

Exercise-5

1. (a) (ii) Diameter = $2 \times$ radius = 2×9 cm = 18 cm
(b) (iii) Radius = $\frac{\text{diameter}}{2} = \frac{2}{2}$ m = 1 m
(c) (iii) BC is the diameter of the circle.

2. (a) O (b) OA, OB and OC (c) AB

