



**Pre activity-** Do the lets get started page no 115 in textbook.

**Exercise 4A**

**1. With the help of a ruler and a pencil, draw line segments of the following lengths.**

- a. 2 cm                      b. 3.5 cm                      c. 4.5 cm
- d. 5 cm                      e. 6.5 cm

**Solution:**

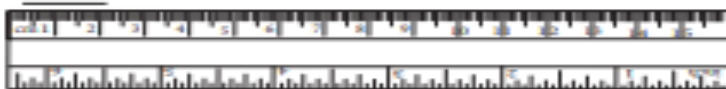
Use a ruler and a pencil to draw the line segments of the given lengths.

Make sure the ruler you are using is long enough to cover the lengths you need to draw.

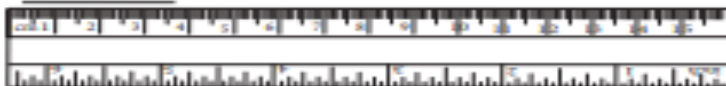
Place the ruler in the position you want to draw the line. Hold the ruler firmly so that it does not move while you draw.

Then, draw the line as per the given measurement.

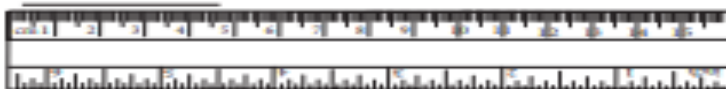
a.



b.



c.



d.



e.



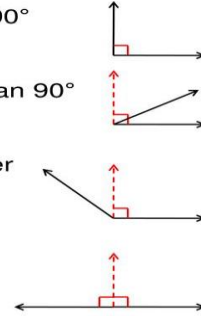
**Angles-** An angle is formed when two rays meet at one point. The point where two rays meet is called the vertex of the angle.

**Types of Angles-**

- 1) Right angle – An angle formed by a vertical line and a horizontal line is called right angle.
- 2) Acute angle- An angle less than a right angle is an acute angle.
- 3) Obtuse angle- An angle greater than a right angle is an obtuse angle.
- 4) Straight angle- An angle formed by joining two right angles is a straight angle.  
The minute and hours hands form a straight angles when the time is 6 o' clock.

### Angle Classifications

- **Right angle** – measures exactly  $90^\circ$
- **Acute angle** – measure is less than  $90^\circ$
- **Obtuse angle** – measure is greater than  $90^\circ$  and less than  $180^\circ$
- **Straight angle** – an angle with a degree measure of exactly  $180^\circ$  (a.k.a. straight line)



v

**Circle-** A circle is a round shape and looks like the buttons ,coins, plates ..

#### Parts of Circle-

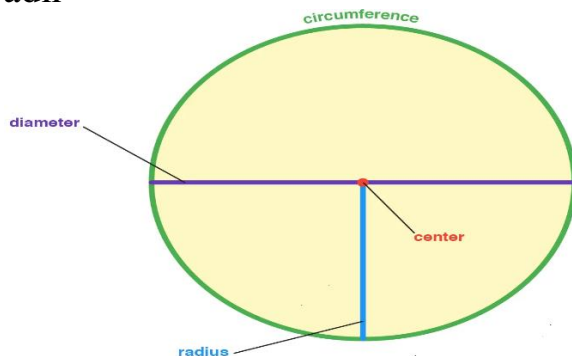
**Circumference-**The boundary of circle is called the circumference.

**Centre-**The point right in the middle of the circle is called the centre.

**Radius-**The distance from the centre to any point on the circumference is called the radius. The plural form of radius is radii.

**Diameter-**The diameter is the straight line starting from any point on the circumference passing through the centre to another point on the circumference.

$$\text{Diameter} = \text{radius} + \text{radius} = 2 \text{ radii}$$



**Polygons-** A polygon is a closed figure made up of line segment. A polygon must have at least 3 sides for it to be a closed figure.

#### Types of polygons-

**1-Triangle-**A triangle is a polygon made up of 3 line segments.

**2- Quadrilateral-**A Quadrilateral is a polygon made up of four line segments.

**3- Pentagon-**A pentagon is a polygon made up of five line segments.

2. What is the length of the following line segments?

a.  b.  c. 

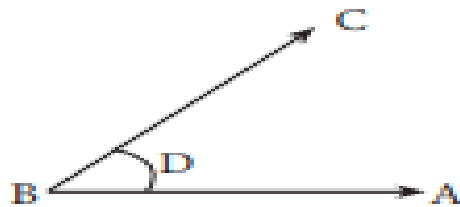
**Solution:**

Align the ruler along the length of the line and measure

a. 2.1 cm      b. 2.5 cm      c. 3.3 cm

3. In the given angle:

- Name the vertex of the angle.
- Name the arms of the angle.
- Name this angle in four different ways.
- Which type of angle is it?



**Solution:**

- B
- BC, BA
- CBA, ABC, B, D
- acute angle

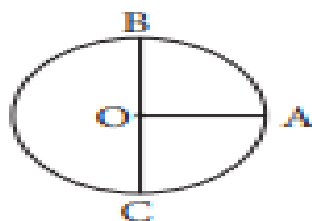
#### Exercise 4B

1. Fill in the blanks.

- The point right in the middle of the circle is called the centre of the circle.
- The plural of radius is radii.
- The diameter is twice the length of the radius.

2. In the given circle, mark the following.

- Circumference
- Centre
- Radius
- Diameter



**Solution:**

O is the centre, OA is the radius, BC is the diameter. Circumference is the length of the outer boundary.

### Exercise 4C

#### 1. Fill in the blanks.

- A polygon is a closed figure made up of line segments.
- A polygon must have at least 3 sides.
- A triangle is a polygon made up of 3 line segments.
- A quadrilateral is a polygon made up of 4 line segments.
- A square is a quadrilateral in which all the four sides are equal.

#### 2. Which of the following shapes are polygons?

a.



b.



c.



**Solution:**

a and b are polygons as these are closed figures made up of line segments.

#### 3. Write the names of the polygons with the given numbers of sides.

	Number of sides	Name of the polygon
a.	3	_____
b.	4	_____

**Solution:**

a. Triangle

b. Quadrilateral

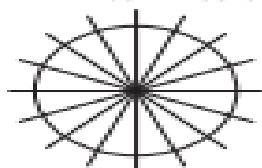
### Exercise 4D

Draw the line(s) of symmetry for the shapes given below. Also, write the number of lines of symmetry for each shape. One has been done for you.

- Already done
- Two lines of symmetry



- Infinite lines of Symmetry



### Exercise 4E

Colour and complete the given pattern.

Follow the pattern and colour accordingly.

**Solution:**



**Post activity-** Write the key concepts of page no 127.

**TEACHER**

**HOD**

**COORDINATOR**

**PRINCIPAL**