

## Unit : - Rectilinear Plane Figures

Number of Periods : - 04

- Clearly understand the first page of the mathematics II text book. Understand what are plane figures?

**Figures drawn on flat surfaces using straight line segments and curved line segments are known as plane figures.**

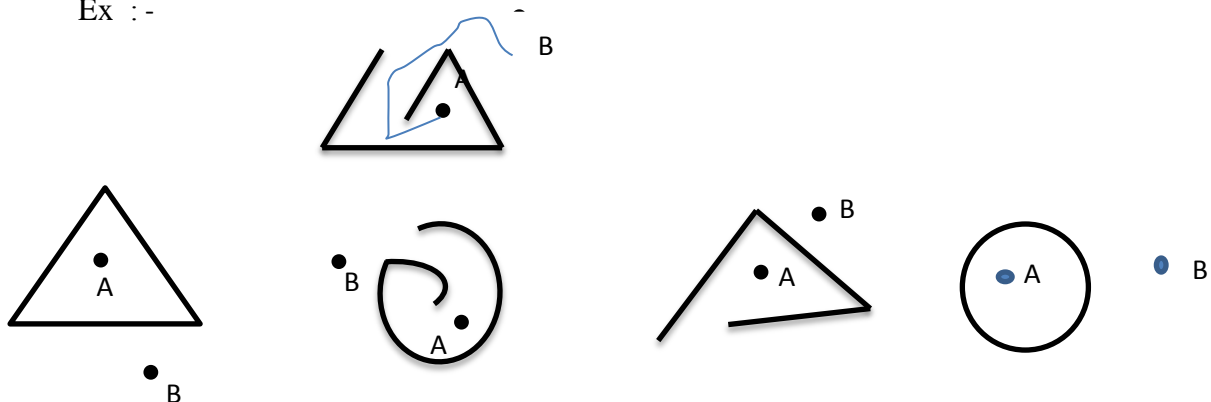
Ex : -



- Give the reason for figure drawn on the surface of a ball is not being a plane figure.

Try to connect the points A and B in the figures below without intersecting the lines of the figures.

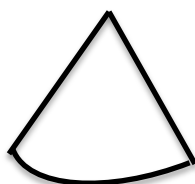
Ex : -



In what kind of above figures it could be connected without intersecting the lines of the figures?

Draw 3 plane figures that are closed by line segments.

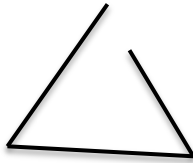
Ex : -



**Plane figures that are completely bounded by line segments are known as closed**

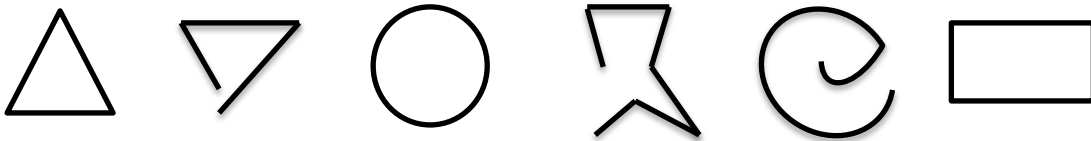
Draw 3 plane figures that are not completely bounded by the line segments.

Ex :-



**Plane figures that are not completely bounded by the line segments are known as open figures**

Identify the open and closed figures from the figures below.



- Draw a closed figure you like. Mark a point inside of it and a point outside of it.
- See whether you could connect both the points without intersecting the lines of the closed figure you drew.
- Through that explain a classmate using a point of the closed figure.

Complete the exercise 12.1 of the page 2 of the text book.

Draw 3 plane figures made only by the straight line segments. Ex :-



**Closed figures bounded only by the straight line segments are known as closed rectilinear plane figures.**

Draw 3 figures that show instances of not a closed rectilinear plane figures.

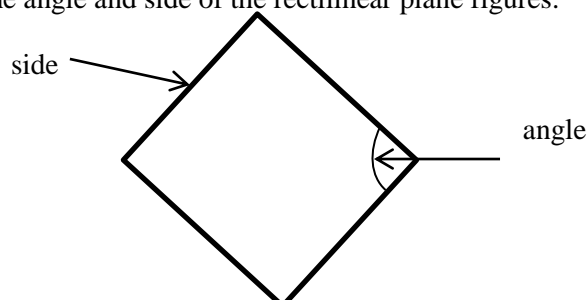
Ex :-



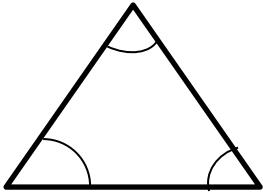
Correctly complete the exercise 12.2 in the page 3 of the text book. Clear the doubts you get.

- Learn the elements of rectilinear plane figures in the page 4 of the text book.

Correctly understand the angle and side of the rectilinear plane figures.



Identify the angles and the sides in the figure shown below.



Thoroughly learn the pages 4 and 5 of the text book. Explain triangle and quadrilateral correctly.

Clearly observe the figures below.



According to the figures above cut the inappropriate word in the sentences below.

- All figures are closed. / opened.
- Lines in All the figures are straight. / not straight.
- There are two / three corners in all the figures.
- There are two / three line segments in all the figures.
- We call this shape as triangle. / quadrilateral.

Types of quadrilateral and their properties.

Clearly learn the pages 4, 5, 6 and 7 of the text book. According to the properties shown there,

Trapezium

Parallelogram

Rhombus

Rectangle

Square

Identify the properties of these quadrilaterals and draw their pictures. Write the special properties of each quadrilateral.

Complete the exercise 12.3 in the page 7 of the text book. Discuss the exercise you have completed with your teacher and clear doubts.

Clearly read the summary in the page 9 of the text book and learn more about the properties of closed rectilinear plane figures.