

**SHIVALIK PUBLIC SCHOOL  
SECTOR 41-B CHANDIGARH**

**POWER POINT PRESENTATION**

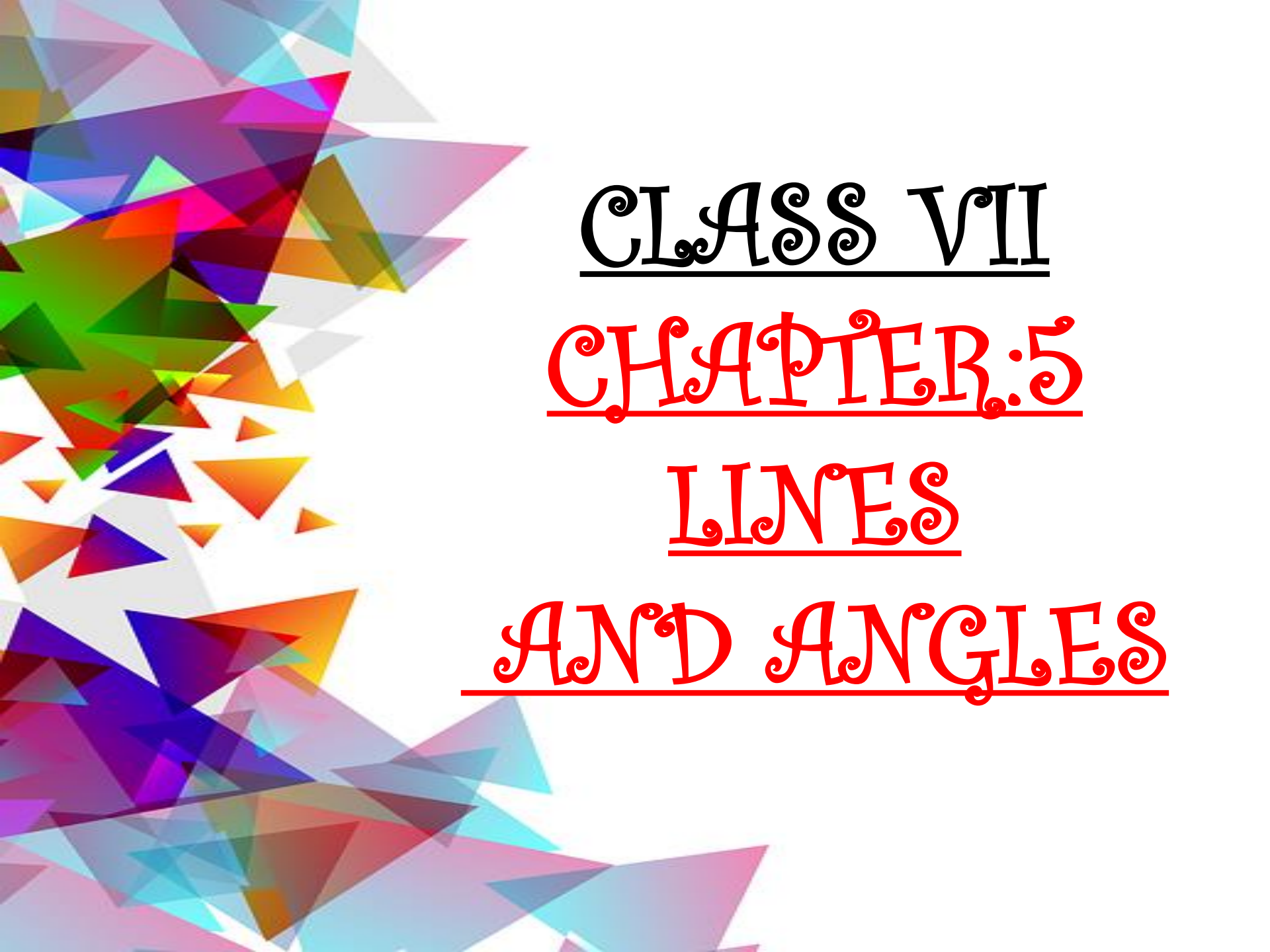
**SUBJECT : MATHEMATICS**

**GRADE : VII**

**CHAPTER NO : 5**

**TITLE OF THE CHAPTER : LINES AND ANGLES**



The background of the slide is a white canvas with a cluster of overlapping, semi-transparent triangles in various colors (blue, purple, green, orange, red) on the left side. The text is positioned on the right side of the slide.

CLASS VII

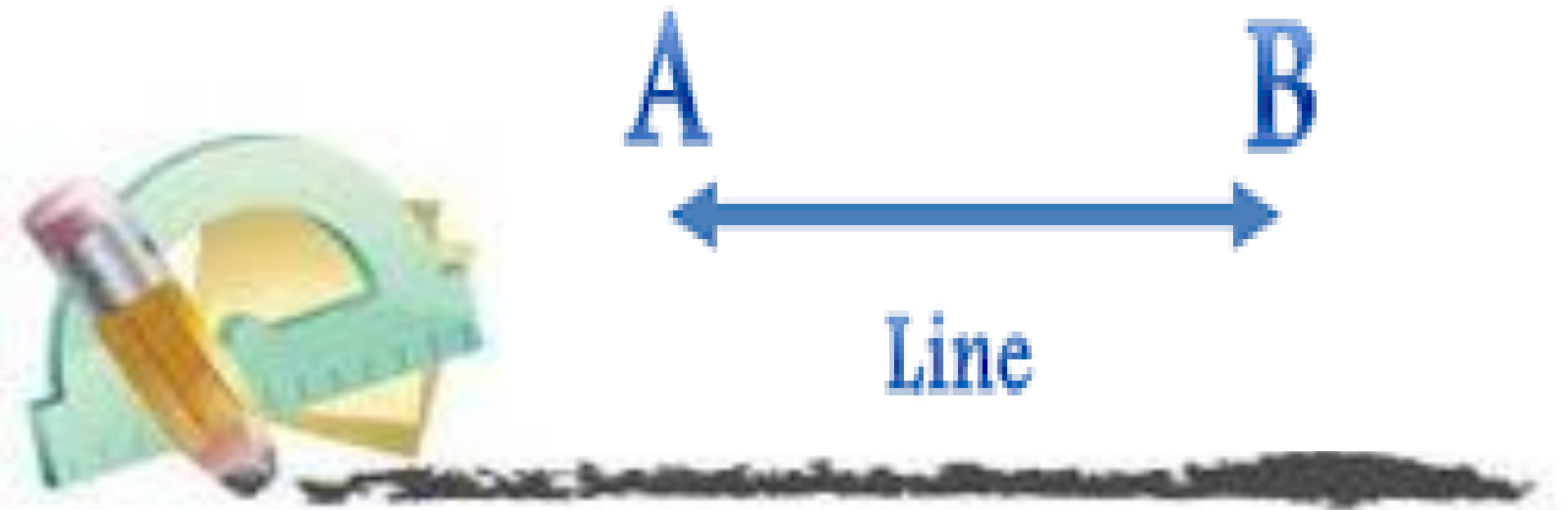
CHAPTER:5

LINES

AND ANGLES

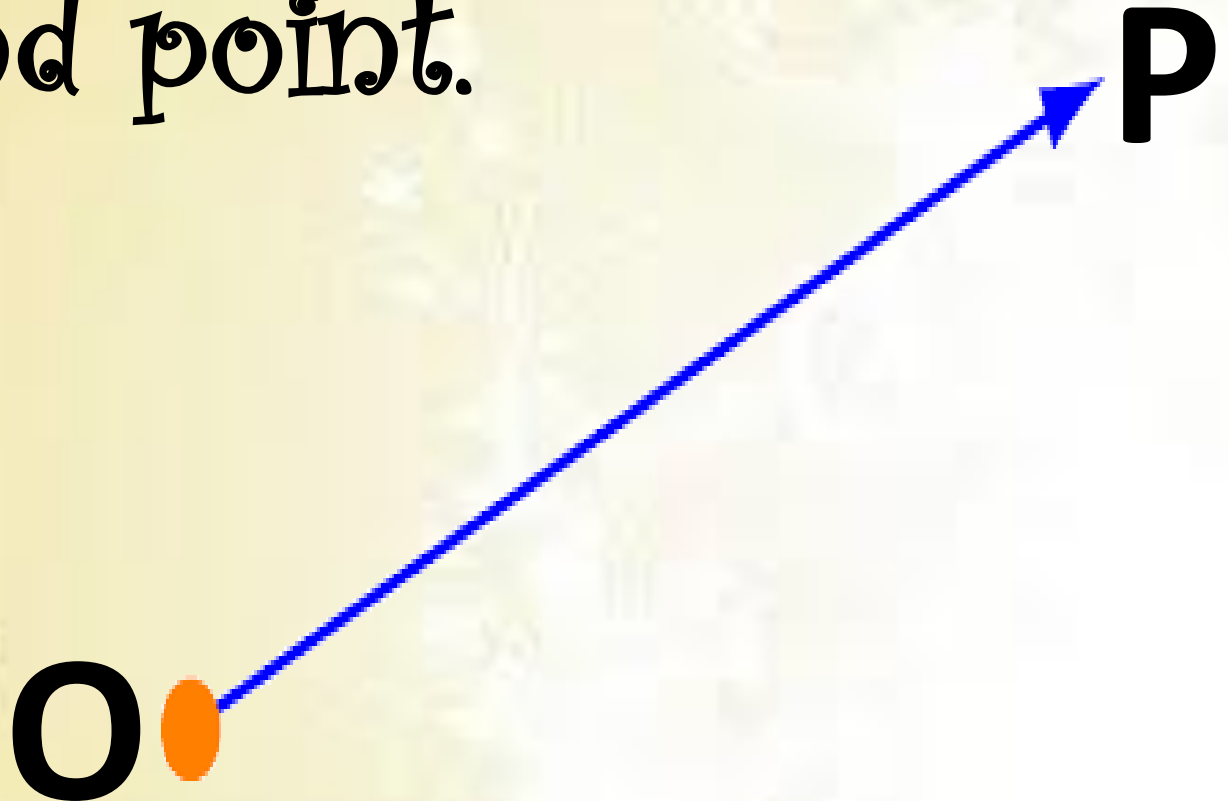
# LINE

A straight endless path.



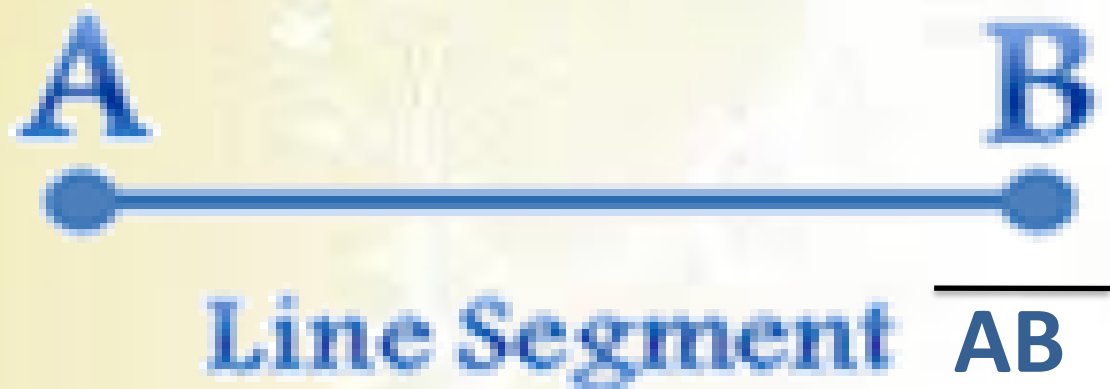
# RAY

It is a part of line having one end point.

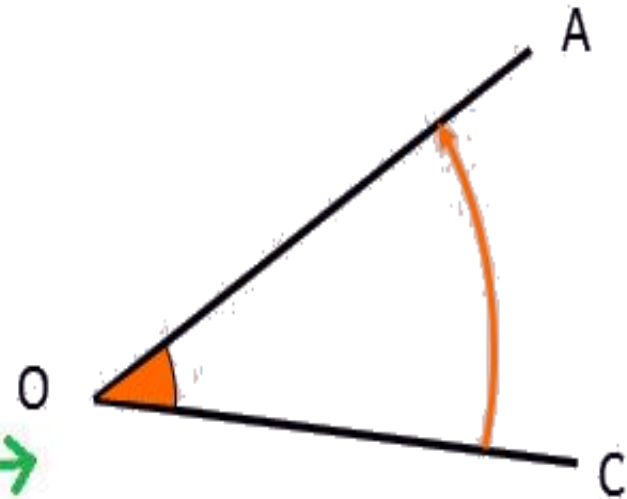
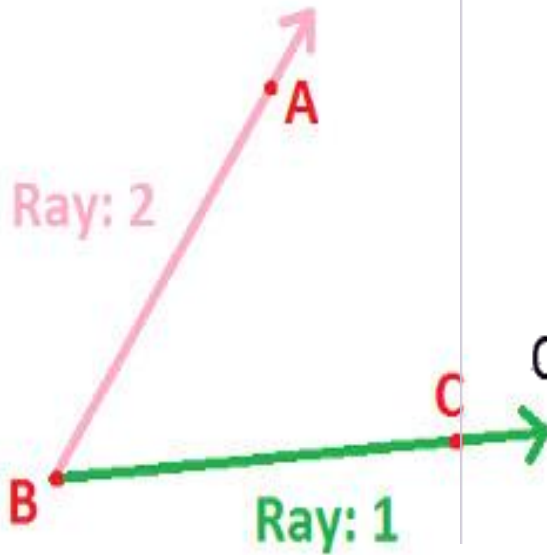
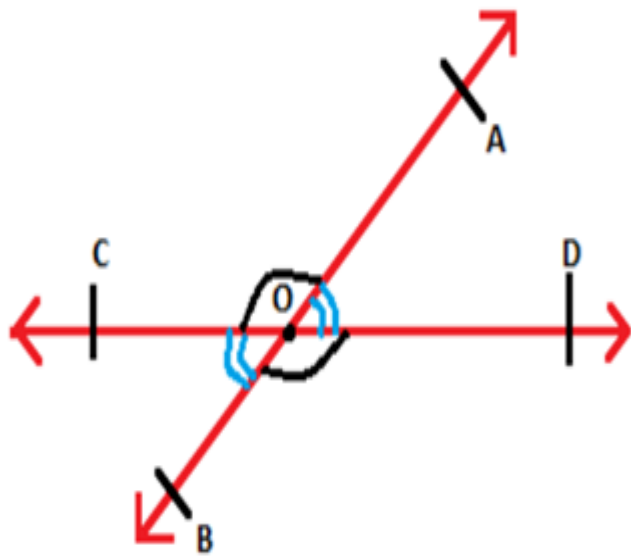


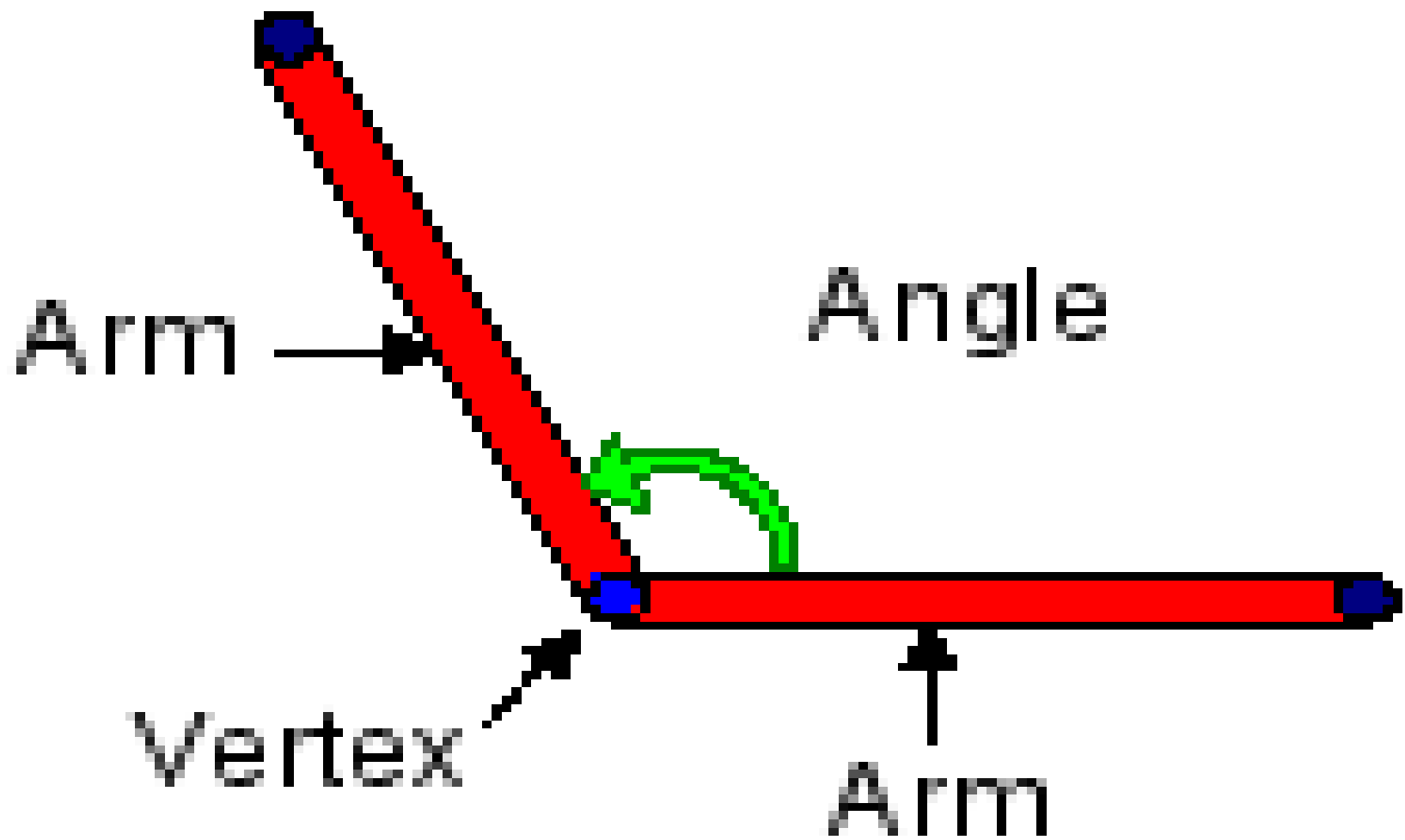
# LINE SEGMENT

A line segment is a part of line having two end points .



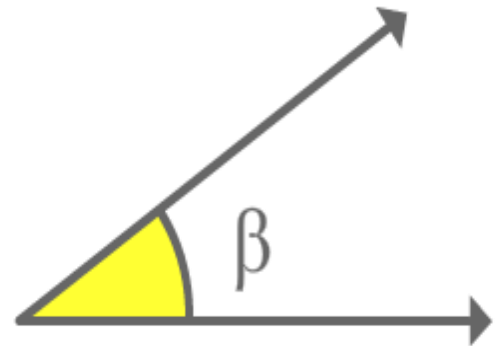
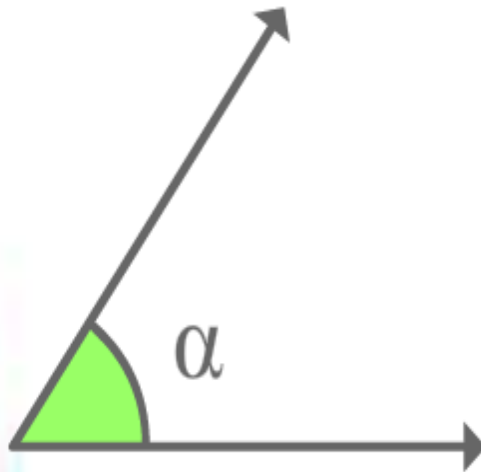
# ANGLES





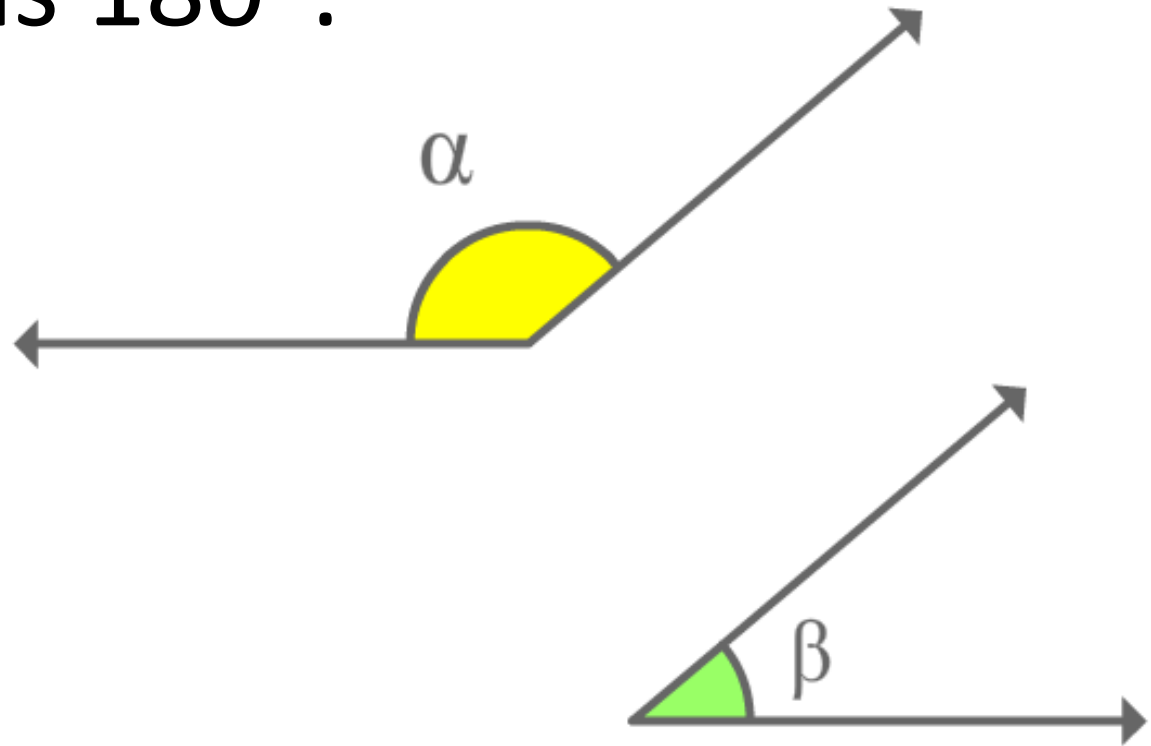
# COMPLEMENTARY ANGLES

The sum of the measures of two angles is  $90^\circ$ .



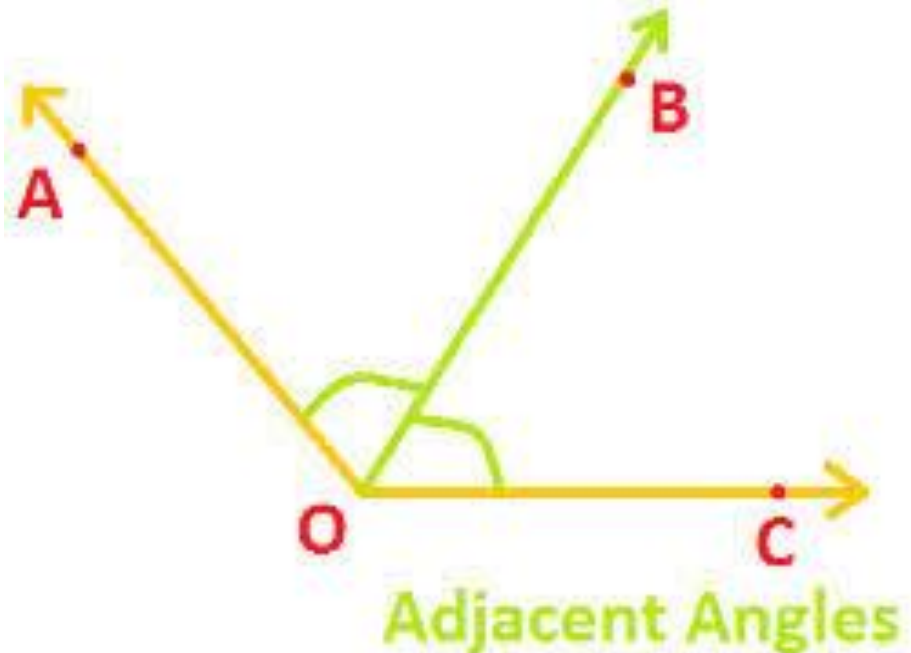
# SUPPLEMENTARY ANGLES

The sum of the measures of two angles is  $180^\circ$ .



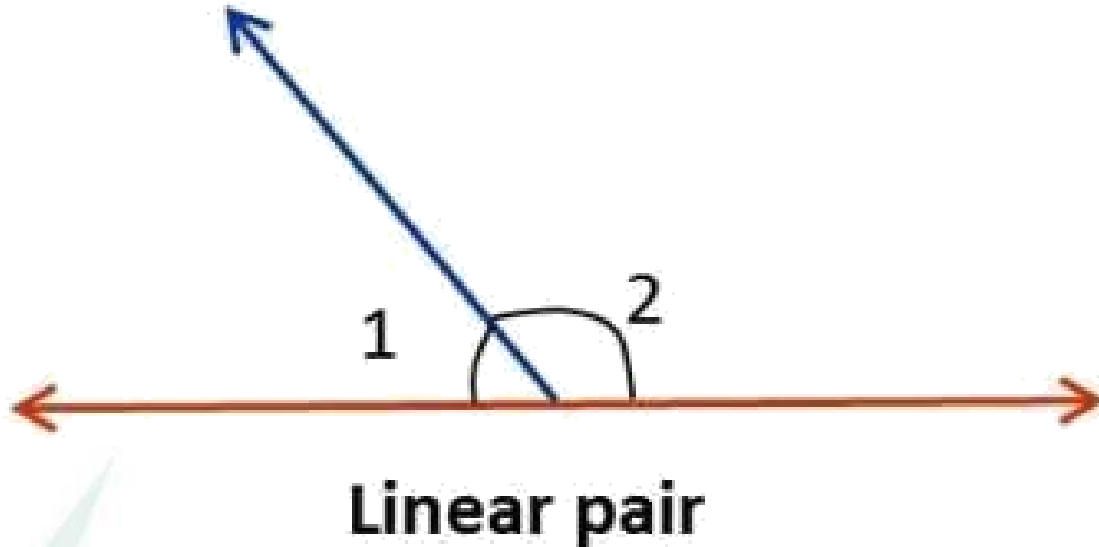
# ADJACENT ANGLES

Two angles having a common vertex and a common arm but no common interior



# LINEAR PAIR

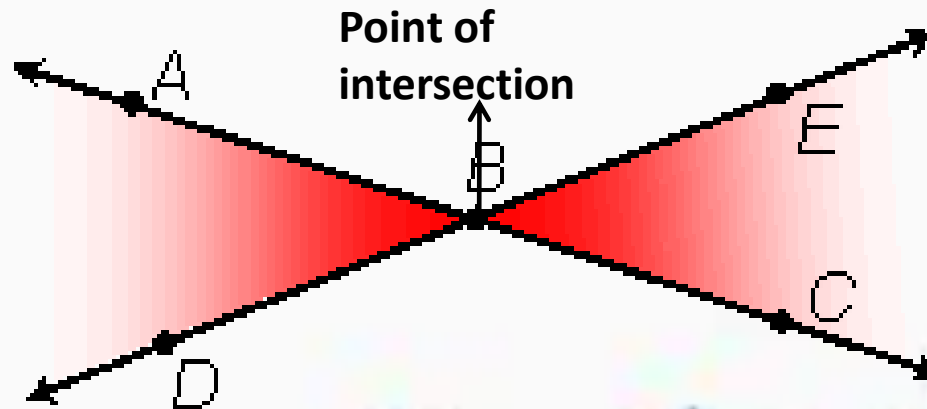
If two adjacent angles are supplementary, they are forming a linear pair.



# INTERSECTING LINES

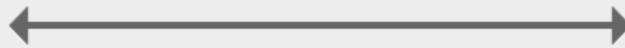
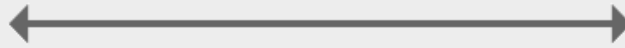
Two lines meeting at a point . The meeting point is called the point of intersection.

$\angle ABD$  and  $\angle EBC$  are vertical angles.



# TRANSVERSAL LINES

A transversal line intersects two or more lines at distinct points.

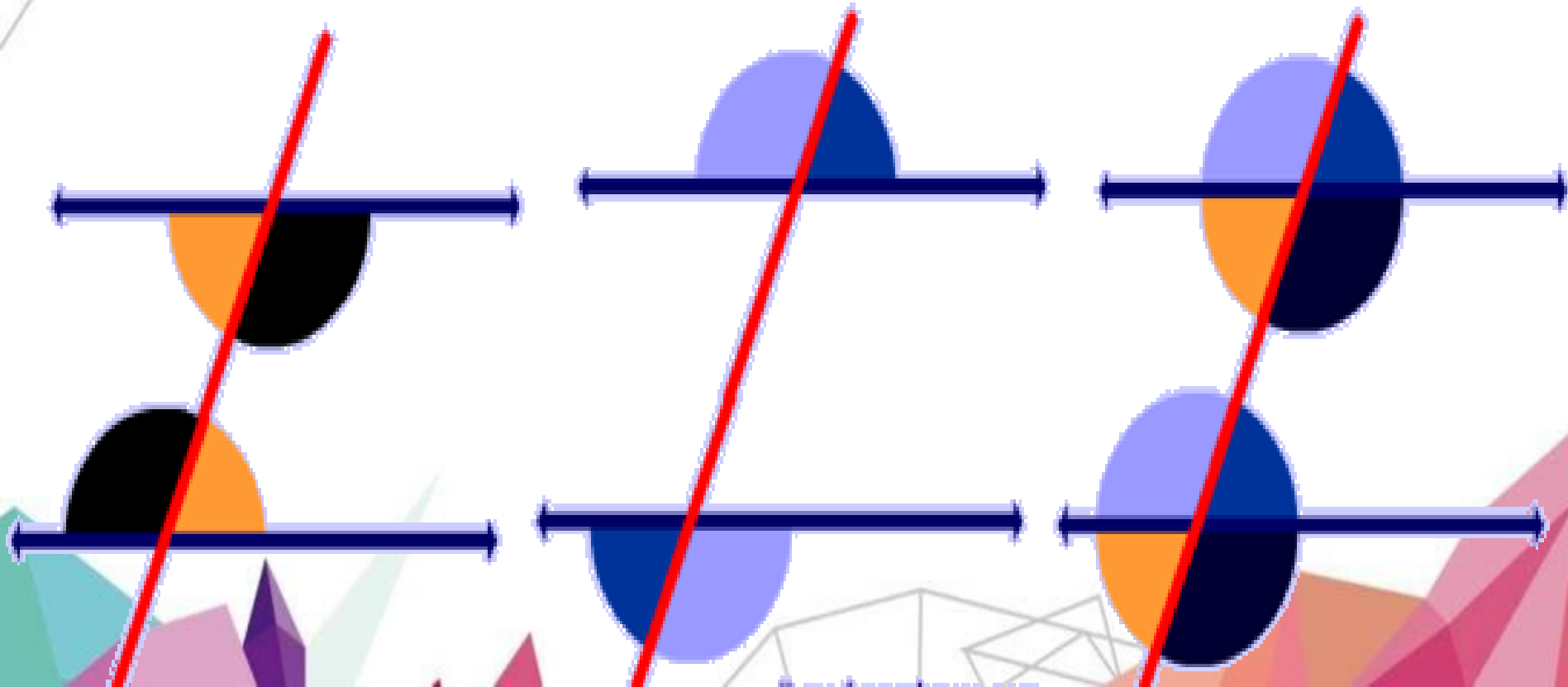


# ANGLES MADE BY TRANSVERSAL

Alternate Interior

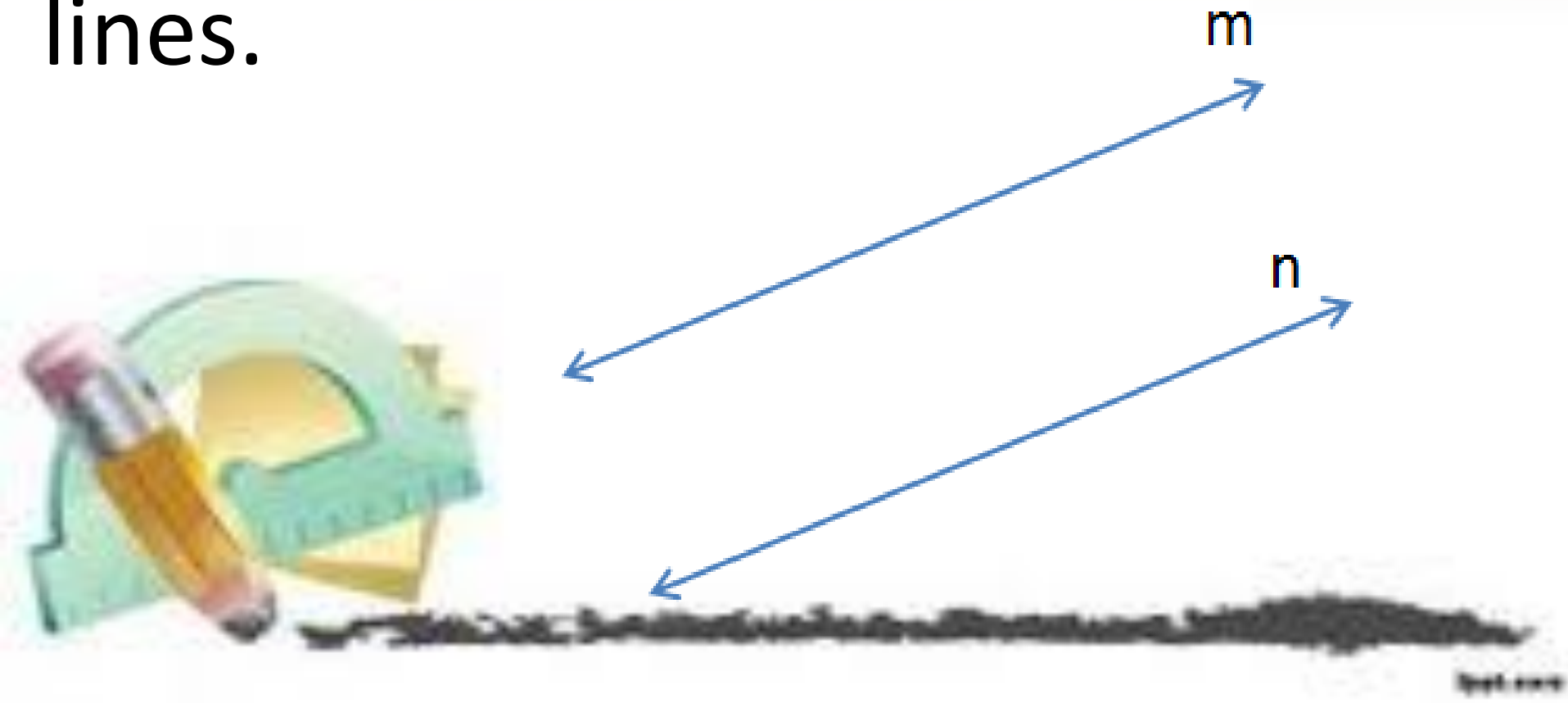
Alternate Exterior

Corresponding



# PARALLEL LINES

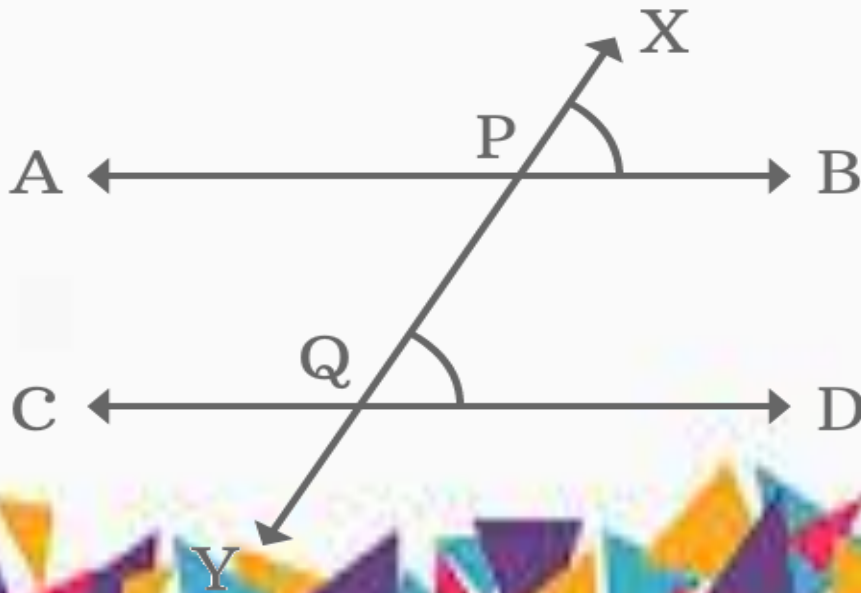
The lines on the plane that do not meet anywhere are called parallel lines.



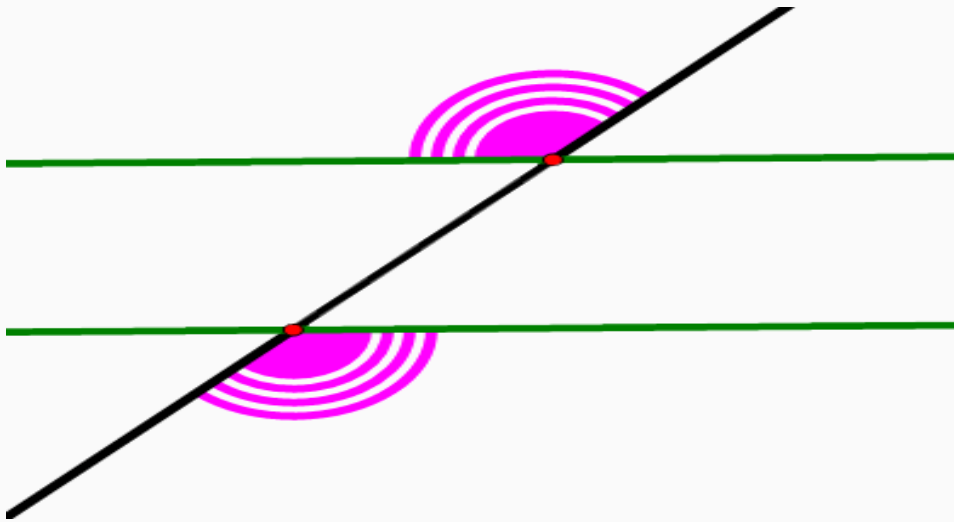
# PARALLEL LINES WITH TRANSVERSAL LINE

When two parallel lines cut by a transversal line then:

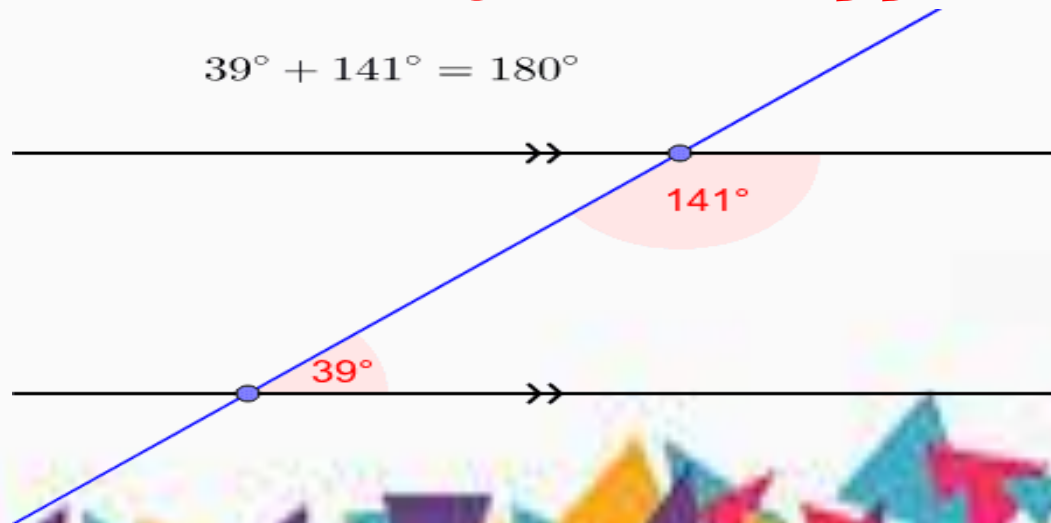
*1. Corresponding angles are equal.*



2. Alternate angles are equal.



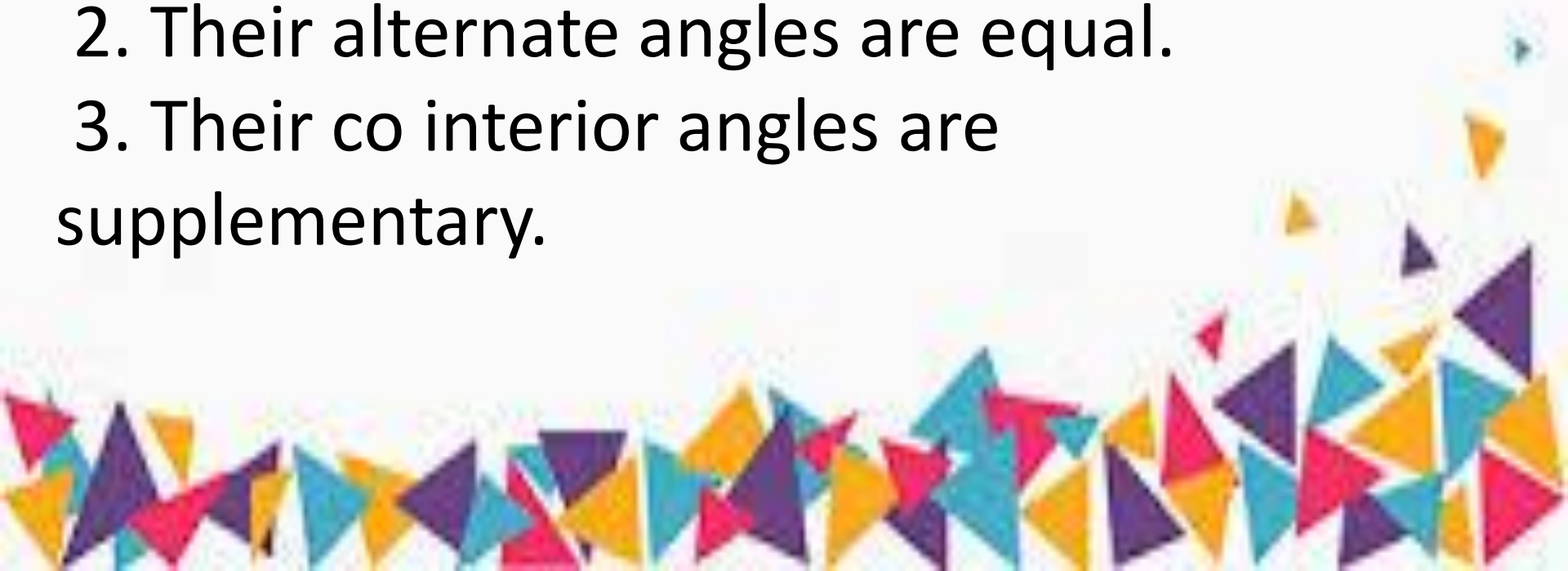
3. Co-interior angles are supplementary



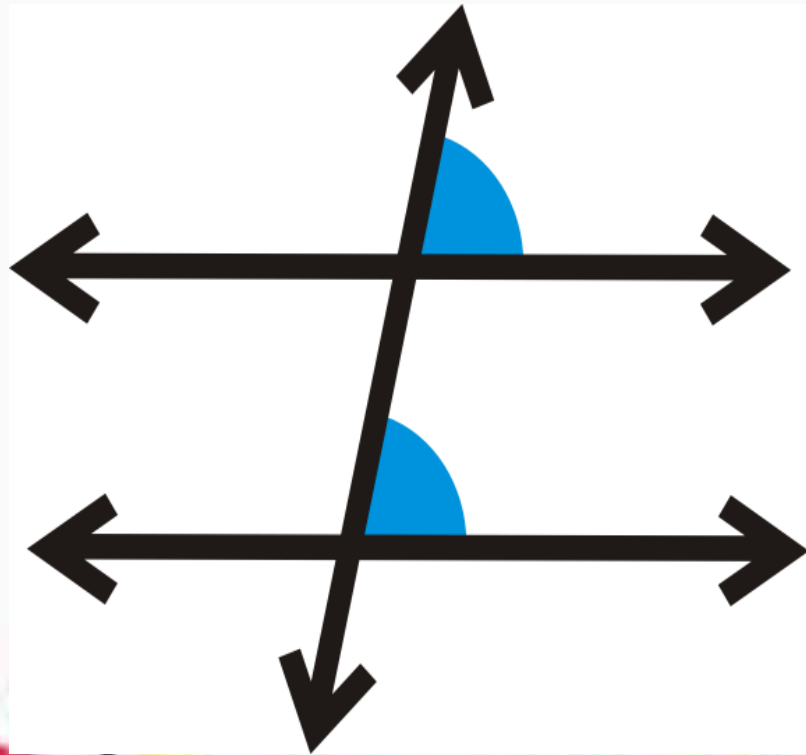
# CHECKING FOR PARALLEL LINES

Two lines are said to be parallel if :

1. Their corresponding angles are equal.
2. Their alternate angles are equal.
3. Their co interior angles are supplementary.



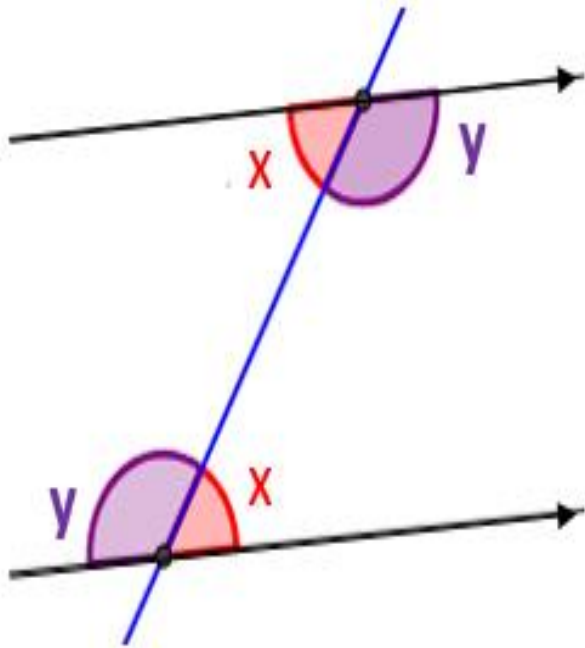
# THE Corresponding Angles



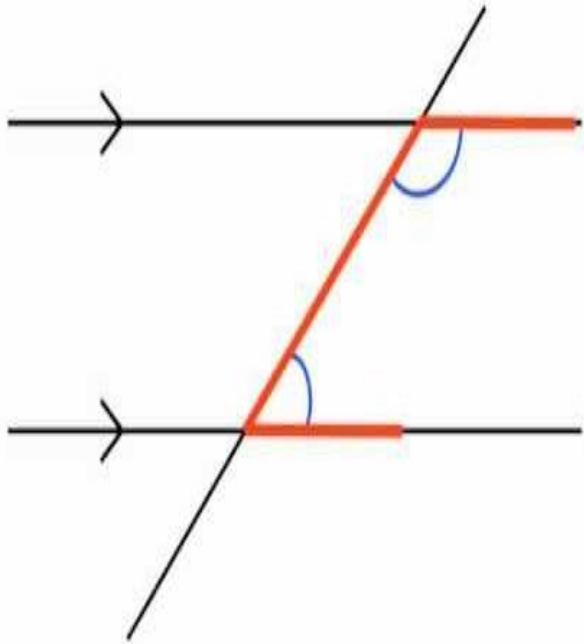
**If two lines are cut by a transversal and the corresponding angles are congruent, then the two lines are parallel.**

# THE Alternate Angles

If two lines are cut by a transversal and the alternate angles are congruent, then the two lines are parallel.



# THE Co-interior Angles



**If two lines are cut by a transversal and the co- interior angles are supplementary, then the two lines are parallel.**



*Thank you!*



**Archana Sharma**  
**SPS, 41-B, Chandigarh**