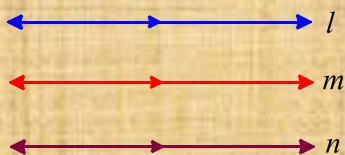


CHAPTER 06

Lines and Angles

Parallel lines theorem:

Straight lines, which are parallel to the same straight line, are parallel to one another.

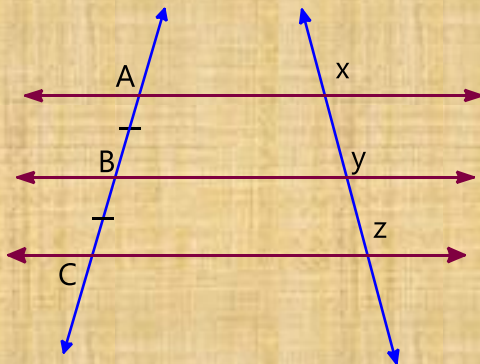


Note:

I) Intercept theorem:

If there are three or more parallel straight lines and the intercepts made by them on any transversal are equal, then the corresponding intercepts on any other transversal are also equal.

Here, $AB = BC$ then $xy = yz$



II) Converse of internet theorem does not exist.

- Consider the quadrilateral ABCD, where AB is not parallel to CD.
- Let P, Q be the midpoints of AD and BC.
- Now $AP = PD$ and $BQ = QC$. But AB, PQ and DC are not parallel.
- But in case $AB \parallel DC$ and if P & Q are midpoints of AD and BC then AB, PQ and DC are parallels.

