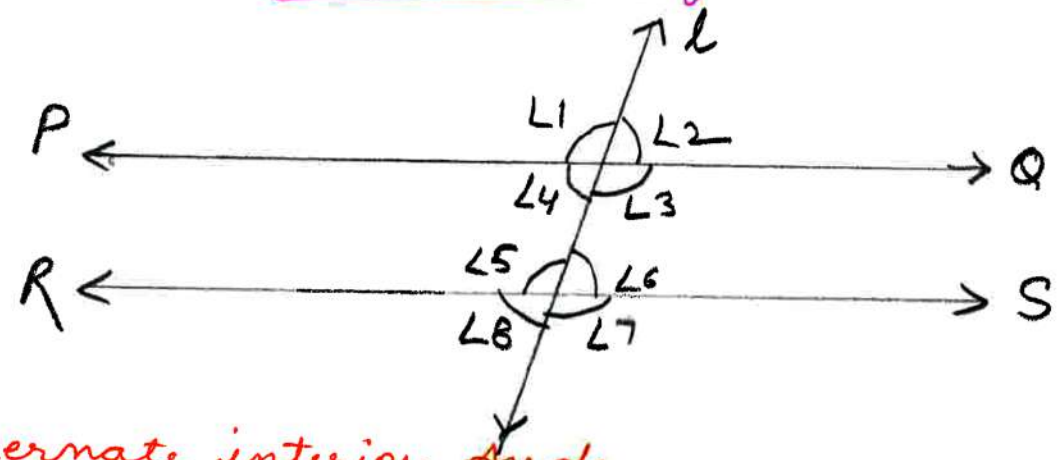
Lines & Angles



Alternate interior Angle

∠3 & ∠5
∠4 & ∠6

Alternate Exterior Angle

∠1 & ∠7
∠2 & ∠8

Corresponding Angle ∠1 & ∠5 , ∠2 & ∠6
∠3 & ∠3 , ∠4 & ∠8

Axiom 1 :- Corresponding Angle Axiom

If transversal interact with 2 straight line, each pair of corresponding is equal.

Axiom 2 :- Corresponding Angle Axiom

If corresponding angle is equal, then 2 line are parallel

Theorem 1

If transversal intersect 2 parallel, each pair of alternate interior angle is equal.

Theorem 2

If transversal intersect 2 line such that pair of alternate interior is equal, then 2 line are parallel.

Theorem 3

If transversal intersect 2 parallel, then each pair of interior angle on same side of transversal is supplementary.

Theorem 4

If transversal intersect 2 line such that a pair of interior angle on same side of transversal is supplementary, then two lines are parallel.

Theorem 5

If 2 lines are parallel to same line, they will be parallel to each other.