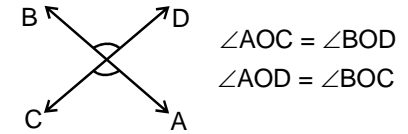


Lines & Angles

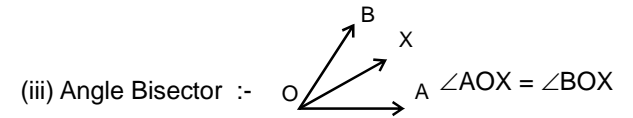
- (vii) Zero \angle :- $\theta = 0^\circ$
- (vi) Complete \angle :- $\theta = 360^\circ$
- (v) Reflex \angle :- $180^\circ < \theta < 360^\circ$
- (iv) Straight \angle :- $\theta = 180^\circ$
- (iii) Obtuse \angle :- $90^\circ < \theta < 180^\circ$
- (ii) Acute \angle :- $0 < \theta < 90^\circ$
- (i) Right \angle :- $\theta = 90^\circ$

(vi) Vertically opp. angles :-



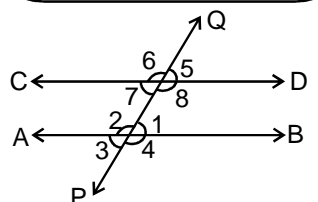
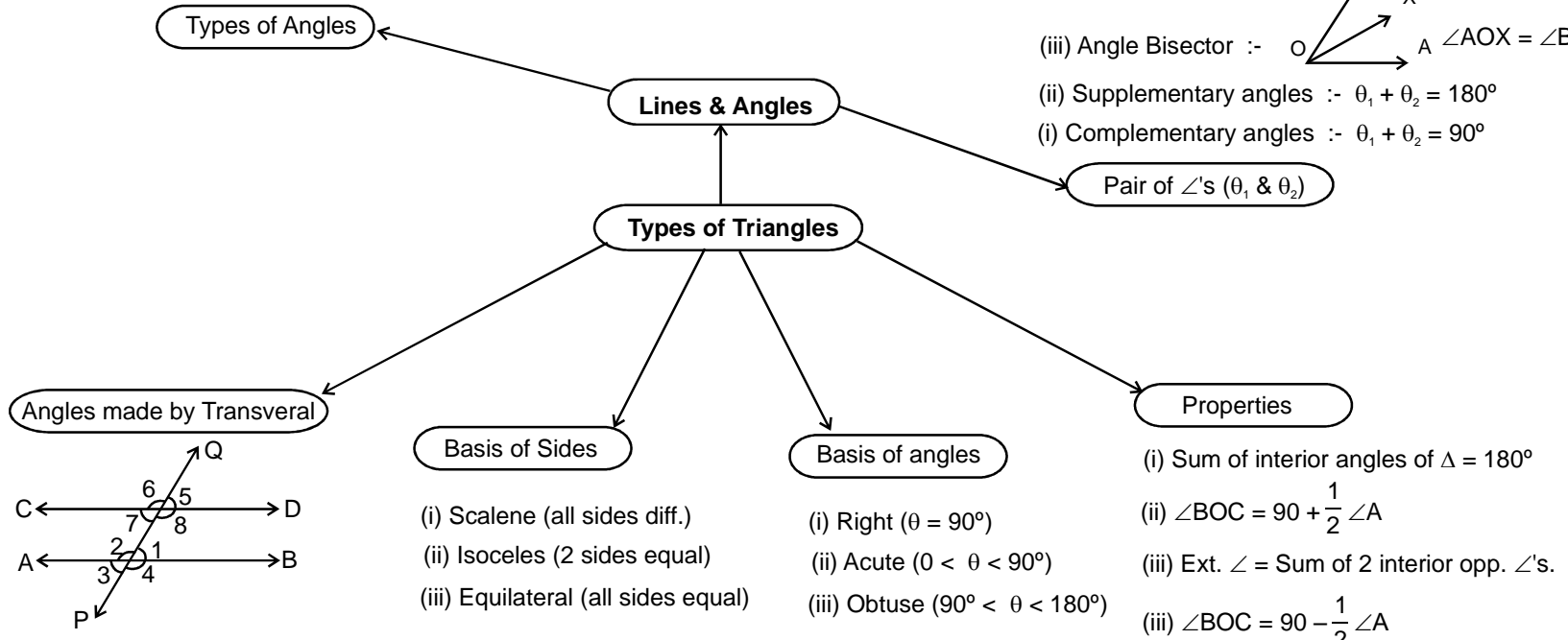
(v) Linear Pair :- $\theta_1 + \theta_2 = 180^\circ$ (θ_1 & θ_2 are adjacent)

(iv) Adjacent angles :- $\left\{ \begin{array}{l} \text{(a) they have the same vertex,} \\ \text{(b) they have a common arm,} \\ \text{(c) non common arms are on either} \\ \text{side of the common arm.} \end{array} \right\}$



(ii) Supplementary angles :- $\theta_1 + \theta_2 = 180^\circ$

(i) Complementary angles :- $\theta_1 + \theta_2 = 90^\circ$



- (i) Corresponding angles
($\angle 1$ & $\angle 5$, $\angle 2$ & $\angle 6$, $\angle 3$ & $\angle 7$, $\angle 4$ & $\angle 8$)
- (ii) Alternate interior angles
($\angle 1$ & $\angle 7$, $\angle 2$ & $\angle 8$)
- (iii) Co-interior angles
($\angle 1 + \angle 8 = 180^\circ = \angle 2 + \angle 7$)
- (iv) Alternate exterior angle
($\angle 4$ & $\angle 6$, $\angle 3$ & $\angle 5$)

- Basis of Sides**
- (i) Scalene (all sides diff.)
 - (ii) Isosceles (2 sides equal)
 - (iii) Equilateral (all sides equal)

- Basis of angles**
- (i) Right ($\theta = 90^\circ$)
 - (ii) Acute ($0 < \theta < 90^\circ$)
 - (iii) Obtuse ($90^\circ < \theta < 180^\circ$)

- Properties**
- (i) Sum of interior angles of $\Delta = 180^\circ$
 - (ii) $\angle BOC = 90 + \frac{1}{2} \angle A$
 - (iii) Ext. $\angle =$ Sum of 2 interior opp. \angle 's.
 - (iii) $\angle BOC = 90 - \frac{1}{2} \angle A$