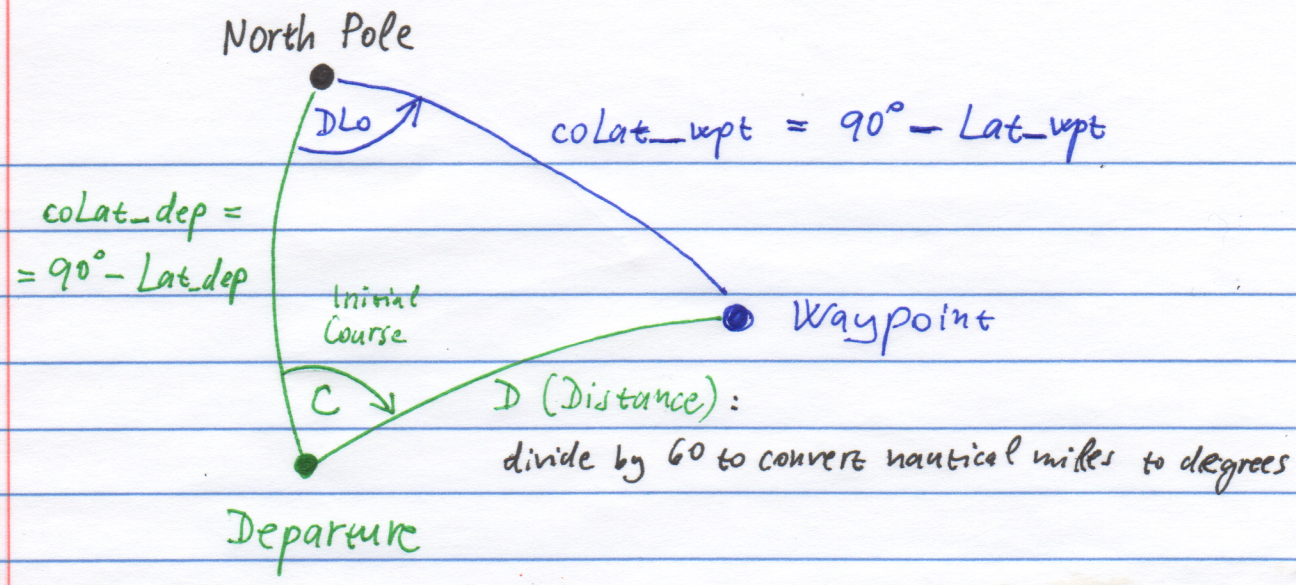

green: knowns (input) blue: unknowns (output)

From cosine rule: get Waypoint latitude Lat_wpt

$$\cos(\text{colat\_wpt}) = \cos D \cos(\text{colat\_dep}) + \sin D \sin(\text{colat\_dep}) \cos C$$

or, $$\sin(\text{Lat\_wpt}) = \cos D \sin(\text{Lat\_dep}) + \sin D \cos(\text{Lat\_dep}) \cos C$$

↓

cell G1 → Lat_wpt (cell G2) is now known → cell B6

From sine rule: get Longitude difference dLo

$$\frac{\sin DLo}{\sin D} = \frac{\sin C}{\sin(\text{colat\_wpt})}$$

$$\sin DLo = \sin D \sin C / \sin(\text{colat\_wpt})$$, or,

$$\sin DLo = \sin D \sin C / \cos(\text{Lat\_wpt})$$

↓

cell G3 → DLo (cell G4) is now known → cell B7