



Finding height using Azimuth by Graphical Method

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It is $\sin(hc) = \sin(D) * \sin(L) + \cos(D) * \cos(L) * \cos(t)$

From graph: $C_1 = \sin(D) * \sin(L) = 0.06$; $C_2 = \cos(D) * \cos(L) = 0.93$; $C_3 = C_2 * \cos(t) = 0.80$;

$$\text{Therefore: } \sin(hc) = C_1 + C_3 = 0.06 + 0.80 = 0.86; \quad hc = 60;$$

Example: $P = 10$; $L = 20$; $t = 30$;

$$C_2 = C_2 * \cos(t) = 0.80;$$

(By calculation hc = 59 deg, 24 sec)