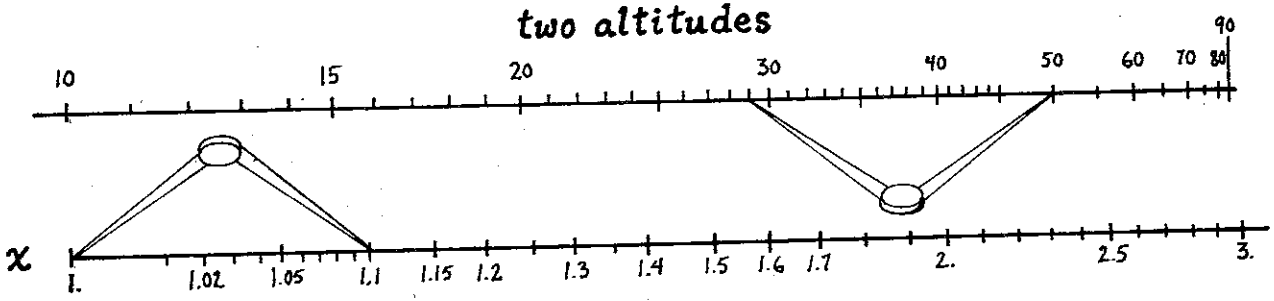

x

distance	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
10°	.2	1.3	2.4	3.4	4.5	5.6								
20°	.3	.9	1.4	2.0	2.6	3.1	3.7	4.8	5.9					
30°	.5	.9	1.3	1.6	2.0	2.4	2.8	3.5	4.3	5.1	5.8			
40°	.7	1.0	1.3	1.6	1.9	2.2	2.5	3.1	3.6	4.2	4.8	5.4	6.0	
50°	.9	1.1	1.4	1.6	1.9	2.1	2.4	2.9	3.4	3.9	4.4	4.9	5.4	5.9
60°	1.1	1.3	1.5	1.8	2.0	2.2	2.4	2.9	3.3	3.7	4.2	4.6	5.0	5.5
70°	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.9	3.4	3.8	4.2	4.6	5.0	5.4
80°	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.1	3.5	3.9	4.3	4.7	5.1	5.5
90°	1.9	2.1	2.3	2.5	2.7	2.9	3.0	3.4	3.8	4.2	4.6	4.9	5.3	5.7

Table 15-2 Refraction correction for distance sights. Enter the top scale with the two altitudes; set one divider leg on each altitude. Then put one divider leg at 1. and read x on the lower scale. (If two altitudes are the same, x = 1.) Enter the table with x and the apparent distance, and take out the correction R′ in minutes and tenths. Example: $h_1 = 29^\circ$, $h_2 = 50^\circ$, $D = 65^\circ$. Then x = 1.10 (as shown). Taking this into the table and interpolating between 60° and 70°, we find R′ = 1.4′. Correction is always positive, added *to sextant distance.*

Formulas: $x = \frac{1}{2}(\sin h_1/\sin h_2) + \frac{1}{2}(\sin h_2/\sin h_1)$

$R' = 1.90' (x - \cos D)/\sin D$