Mid-Lat Sailing Worksheet

Determine Arrival Coordinates

GIVEN: Cn_____ D _____nm

C $^{N(+)}/_{S(-)}$ _____° $^{W(+)}/_{E(-)}$

/ = D_____ × cos C_____°
/ = $^{+}/_{-}$ _____nm = $^{+}/_{-}$ _____′
L_1 ( ) _____°___.__′
+ / ( ) _____°___.__′
L_2 ( ) _____°___.__′
+ L_1 ( ) _____°___.__′
total ( ) _____°___.__′ ÷ 2
= Lm ( ) _____°___.__′
Lm ( ) ____.____°

DLo = (D_____ × sin C_____°)
÷ cos Lm _____.____°
DLo = ($^{+}/_{-}$) _____.____° $^{W(+)}/_{E(-)}$

Lo_1 _____°___.__′
+DLo ( )_____°___.__′
Lo_2 _____°___.__′

SOLUTION:

L_2 _____°___′ $^{N}/_{S}$
Lo_2 _____°___′ $^{E}/_{W}$

Determine Cn and D

GIVEN: L_1 _____°___.__′
Lo_1 _____°___.__′
L_2 _____°___.__′
Lo_2 _____°___.__′
L_2 ( ) _____°___.__′
– L_1 ( ) _____°___.__′
/ = ( ) _____°___.__′ (× 60′/°)
/ = ( ) _____.__′

Lo_2 ( ) _____°___.__′
– Lo_1 ( )_____°___.__′
DLo = ( )____°___.__′(× 60′/°)
DLo = ( ) ____.__′

L_2 ( ) _____°___.__′
+ L_1 ( ) _____°___.__′
total ( ) _____°___.__′ ÷ 2
= Lm ( )_____°___.__′
Lm ( ) _____.____°

C = arctan [DLo( )_____.__′ ×
cos Lm ( )_____.___° ÷ / _____.___′] = ____.___°
C = $^{N}/_{S}$ _____.___° $^{E}/_{W}$

SOLUTION:

Cn = _____°
D = / ____.__′ ÷ cos C ___.__°
D = _____.___′ = _____ nm