

# HAVERSIN.FXI

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Lb1 1
Norm
ClrText
"LAT1 N+ S-"?→B
"LON1 E+ W-"?→A
ClrText
"LAT2 N+ S-"?→D
"LON2 E+ W-"?→C
ClrText
C→A→E:D→B→F
 $\cos(B) \times \sin(D) - \sin(B) \times \cos(D) \times \cos(E) \rightarrow Y$ 
 $\sin(E) \times \cos(D) \rightarrow X$ 
Pol(Y,X):List Ans[2]→K
If K<0
Then K+360→K
IfEnd
A→C→G:B→D→H
 $\cos(D) \times \sin(B) - \sin(D) \times \cos(B) \times \cos(G) \rightarrow Y$ 
 $\sin(G) \times \cos(B) \rightarrow X$ 
Pol(Y,X):List Ans[2]→L
L-180→L
Lb1 2
If L<0
Then L+360→L:Goto 2
IfEnd
"START BEAR:"
K↵
"END BEAR:"
L↵
ClrText
 $\cos^{-1}((\sin(B) \times \sin(D)) + (\cos(B) \times \cos(D) \times \cos(E))) \times 6371 \times \pi \div 180 \rightarrow M$ 
M÷1.609344→N
Fix 1
"DIST (Km):"
M↵
"DIST (Mi):"
N↵
ClrText
Goto 1

```