



5.3 Excel Equations for WinHorizon Output Processing

Delta X=(Target Distance from ship km*1000m/1km)*Sin(Radians(Bearing from ship))

In Excel: **Delta X** =(B9*1000)*SIN(RADIANS(C9))

Provided that all the columns represent the same as above formula where:

B9= Cell address for Target Distance (Km)

C9= Cell address for Bearing from ship (Degrees)

Delta Y=(Target Distance from ship km*1000m/1km)*Cos(Radians(Bearing from ship))

In Excel: **Delta Y** =(B9*1000)*COS(RADIANS(C9))

X=Radar UTME+DeltaX

In Excel: **X**=ROUND((M9+(B9*1000)*SIN(RADIANS(C9))),0)

The "Round" is not necessary to having the right coordinate, but without it there would be a large amount of unneeded accuracy (decimal places)

Y=Radar UTMN+DeltaY

In Excel: **Y**=ROUND((N9+(B9*1000)*COS(RADIANS(C9))),0) \

2D Calculation: UTMN and UTME for Radar Return

