

TI-86

Degrees-Minutes-Seconds and Radians

Important symbols and where to find them:

- ► **DMS** can be found in MATH-ANGLE.
- π can be found above the \wedge .
- The minute symbol (') can be found in MATH-ANGLE.
- ► **Dec** can be found in in BASE-CONV.

1. Find the decimal approximation for $46^\circ 30' 20''$.
Either Degree or Radian MODE is fine.
Enter the numbers and symbols.
Press ENTER.
The result should be 46.5055555556.
2. Change 46.5° to Degrees-Minutes-Seconds.
Either Degree or Radian MODE is fine.
Make the home screen look like this: **46.5►DMS**
The result should be $46^\circ 30' 0''$.
3. Change $46^\circ 30' 20''$ to radians.
Either Degree or Radian MODE is fine.
There is no special function on the calculator to handle the conversion. Just do the math as indicated here: The home screen should eventually look like this: **(46' 30' 20') (π /180)**
The result should be .811675064914.
4. Change 46.507° to radians.
Either Degree or Radian MODE is fine.
There is no special function on the calculator to handle the conversion. Just do the math as indicated here: **(46.507) (π /180)**
The result should be .811700275225.
5. Change .81158 radians to Degrees.
We must be in Degree MODE.
The home screen should eventually look like this: **.81158^r** or **.81158^r ►DMS** depending on which form you would like for your answer.
The result should be 46.500087372 or $46^\circ 30' 0.391''$
6. Add $46^\circ 30' 20'' + 10^\circ 40' 50''$.
Either Degree or Radian MODE is fine.
The home screen should eventually look just like this: **46' 30' 20' + 10' 40' 50'**
The result should be approximately 57.1861111111.
7. Change the result of problem 6 to Degrees-Minutes-Seconds.
The home screen should look like this if coming directly from the example above: **Ans ► DMS**.
The result should be $57^\circ 11' 10''$.