

## Calculator Notes 1 Math 1113 Spring 2001 Professor Edwards

The most important rule when using your calculator for trigonometry is: Check your mode before you enter code! Your calculator will always be in either radian or degree mode, and the mode affects the answer.

### To change this mode:

Hit "MODE".

Use the arrow keys to move the cursor to "Angle".

Use the right arrow to get the choice of "1. Radian 2. Degree"

Hit the appropriate number (1 or 2). Alternately, highlight your choice with the arrow keys and hit ENTER.

Hit ENTER to return to the main screen.

### For conversions between radians, degree-minute-seconds, and decimal degrees:

Get the **Angle menu** by hitting 2<sup>nd</sup> MATH 2. Useful for us right now are the following:

1. When in radian mode, this will have the calculator read the input as being measured in degrees.  
In short, it multiplies the number by  $\pi/180$ , but it only does this in **radian** mode.
2. When in degree mode, this will have the calculator read the input as being measured in radians.  
In short, it multiplies the number by  $180/\pi$ , but only when in **degree** mode.
8. Changes decimal to degree-minute-seconds, either mode, but **note**:  
The input number is interpreted as degrees or radian according to the current mode.
9. Changes degree-minute-seconds to decimal degrees, either mode, but **note**:  
Again, the input is interpreted as degrees or radian according to the current mode.

When a number is input onto a trig function, ordinarily the calculator will treat the number as degree or radians according to the current mode. But if you enter a number using the E or ' or " keys, then the calculator interprets the input as degrees. Alternately you can force degrees by using item 1 on the Angle menu. If you follow a number with the **r** from item 2 on the angle menu, then the input is considered radians.

The key with the green diamond will give a decimal answer, rather than exact. You can use it 2 ways: Either hit it just before hitting ENTER, or finish the calculation, then hit the diamond key and ENTER again.

If your calculator is in the middle of a long process and you want to interrupt, push ON.

The Catalog key gives a list of all built-in functions. When Catalog is pushed, the keyboard is in Alpha mode. To quickly find a function, press the key corresponding to the first letter of the word. For instance, push the T key to get to tangent. If you scroll to the function, you will get some (minimal) help at the very bottom of the screen.

To clear everything, including single letter memory entries, use the NewProblem function (F6, 2, ENTER). This function does not erase entries in the Y= menu.