

## T-3 NOTES

Use your calculator to find  $\sin 46^\circ 18'$  give answer to 4 places after the decimal. .7230

What if we wanted  $\csc 46^\circ 18'$  instead? Our calculator does not have a CSC button.

We know:  $\csc A = \frac{1}{\sin A}$  so...  $\csc 46^\circ 18' = \frac{1}{\sin 46^\circ 18'} = \frac{1}{.7230}$

use your calculator to get 1.3832

to use your calculator to get this first find

$\sin 46^\circ 18'$  then hit the key that says

$x^{-1}$

it is under the word MATRIX

Try  $\sec 83^\circ 36'$

First, write the fraction that it is equal to in terms of either sin, cos or tan

$$\sec 83^\circ 36' = \frac{1}{\cos 83^\circ 36'} = 8.9711$$

then solve

to use your calculator to get this first find

$\cos 83^\circ 36'$  then hit the key that says

$x^{-1}$

it is under the word MATRIX

Now, what if this is the question **sec A = 1.8652** ?

Well...what are we looking for a ratio or an angle?

An Angle...so A for angle , A for arcsec

So, we need to find the **arc sec(1.8652) = A** but we don't have that button 🙄

well...we know this:  $\sec A = \frac{1}{\cos A} = 1.8652$

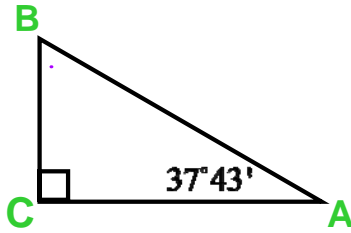
$\cos A = \frac{1}{\sec A}$   
 so  $\cos A = \frac{1}{1.8652}$

so that means:  $\frac{1}{\cos A} = \frac{1.8652}{1}$        $\frac{\cos A}{1} = \frac{1}{1.8652}$

$\cos A = \frac{1}{1.8652}$

$\arccos\left(\frac{1}{1.8652}\right) = A$

2nd cos<sup>-1</sup> (1/1.8652)  
 2nd APPS 4: DMS  
 Enter  
**57°35'**



Use this idea on T-4

$\angle B = 180^\circ - 90^\circ - 37^\circ 43'$   
 Find angle B.

$\angle B = 90^\circ 00'$   
 $- 37^\circ 43'$

$\underline{\hspace{10em}}$   
**52° 17'**