

## 15.10 Inverse Trig Functions

<b>Arc sin = <math>\sin^{-1}</math></b>	<b>Arc csc = <math>1/\sin^{-1}</math></b>
<b>Arc cos = <math>\cos^{-1}</math></b>	<b>Arc sec = <math>1/\cos^{-1}</math></b>
<b>Arc tan = <math>\tan^{-1}</math></b>	<b>Arc cot = <math>1/\tan^{-1}</math></b>

Find, in radians and degrees, Arc sin ( $-\sqrt{2}/2$ ) =

$$\textcircled{-45} \left( \frac{\pi}{180} \right) = \frac{-45\pi}{180} = \textcircled{-\frac{\pi}{4}}$$

Find, in radians and degrees, Arc cos (0) =

$$90^\circ \left( \frac{\pi}{180} \right) = \textcircled{\frac{\pi}{2}}$$

Find, in radians and degrees, Arc tan ( $\sqrt{3}/3$ )

$$30^\circ \left( \frac{\pi}{180} \right) = \pi/6$$

**Find the value of the expression:**

**1.  $\sin (\text{Arc cos } 1/2)$**

**2.  $\cos (\text{Arc tan } (-\sqrt{3}))$**

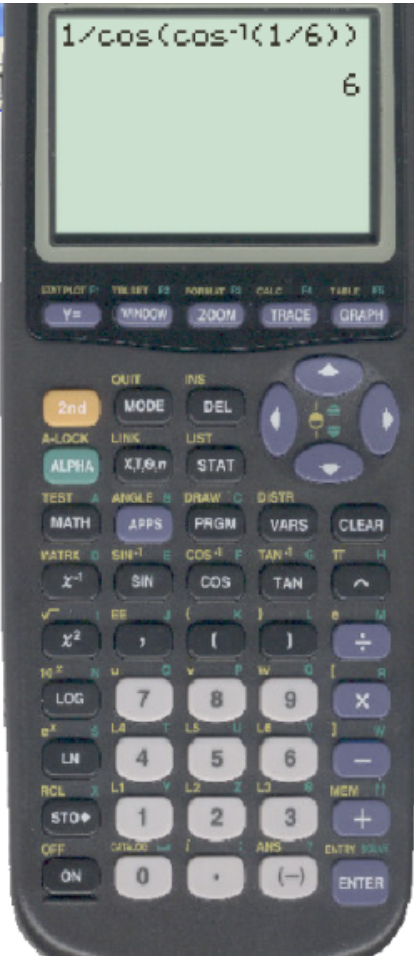
**3.  $\sec (\text{Arc cos } (1/6))$**

15.10 arc \* - SMART Notebook

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Find the value of the expression

1.  $\sin (\text{Arc cos } 1/2)$
2.  $\cos (\text{Arc tan } (-\sqrt{3}))$   
 $\cdot 5 \quad \frac{1}{2}$
3.  $\sec (\text{Arc cos } (1/6))$



The calculator screen displays the expression  $1/\cos(\cos^{-1}(1/6))$  and the result 6.

**Homework: pg 743 #1-37odd**

*Review Day Tomorrow*

*Test on Thursday Nov. 5th*