

Inverse Trig Functions part 1 :  $\theta$  in Quadrant 1.

Find each of the following in radians,  $\theta$  in  $[0, \pi/2]$

Answer should be exact if possible, otherwise approximate with calculator.

1)  $\sin^{-1}\left(\frac{1}{2}\right) = \underline{\hspace{2cm}}$

2)  $\tan^{-1}(1) = \underline{\hspace{2cm}}$

3)  $\cos^{-1}\left(\frac{\sqrt{2}}{2}\right) = \underline{\hspace{2cm}}$

4)  $\sin^{-1}\left(\frac{1}{3}\right) = \underline{\hspace{2cm}}$

5)  $\tan^{-1}(\sqrt{3}) = \underline{\hspace{2cm}}$

6)  $\cos^{-1}(0) = \underline{\hspace{2cm}}$

Find each of the following in degrees,  $\theta$  in  $[0^\circ, 90^\circ]$

Answer should be exact if possible, otherwise approximate with calculator.

7)  $\cos^{-1}\left(\frac{\sqrt{3}}{2}\right) = \underline{\hspace{2cm}}$

8)  $\tan^{-1}(3) = \underline{\hspace{2cm}}$

9)  $\tan^{-1}\left(\frac{\sqrt{3}}{3}\right) = \underline{\hspace{2cm}}$

10)  $\sin^{-1}(0) = \underline{\hspace{2cm}}$

11)  $\cos^{-1}(2) = \underline{\hspace{2cm}}$

12)  $\sin^{-1}\left(\frac{\sqrt{3}}{2}\right) = \underline{\hspace{2cm}}$