

## I) Evaluating Trigonometric Functions

1)  $\tan -\frac{5\pi}{4}$

3)  $\sec \frac{\pi}{3}$

5)  $\cot -\frac{7\pi}{6}$

7)  $\cos \frac{\pi}{3}$

9)  $\csc -\frac{5\pi}{2}$

11)  $\sec -1050^\circ$

13)  $\cos -180^\circ$

2)  $\tan \frac{7\pi}{6}$

4)  $\tan -\frac{\pi}{6}$

6)  $\cos -\frac{\pi}{4}$

8)  $\cos 675^\circ$

10)  $\sin 990^\circ$

12)  $\cos \frac{13\pi}{4}$

14)  $\sec \frac{16\pi}{3}$

## II) Evaluating Inverse Trigonometric Functions

1.  $\sin^{-1}\left(\frac{1}{2}\right)$

2.  $\cos^{-1}\left(\frac{1}{2}\right)$

3.  $\tan^{-1}\left(\frac{\sqrt{3}}{3}\right)$

4.  $\arccos\left(\frac{\sqrt{3}}{2}\right)$

5.  $\arcsin\left(\frac{\sqrt{2}}{2}\right)$

6.  $\arctan(1)$

7.  $\arcsin^{-1}\left(-\frac{1}{2}\right)$

8.  $\arccos\left(-\frac{1}{2}\right)$

9.  $\arctan\left(-\frac{\sqrt{3}}{3}\right)$

10.  $\cos^{-1}\left(-\frac{\sqrt{3}}{2}\right)$

11.  $\sin^{-1}\left(-\frac{\sqrt{2}}{2}\right)$

12.  $\tan^{-1}(-1)$

III) Solve each equation

1) Find  $x$  when  $0 \leq x \leq 2\pi$  :  $2(\cos x + 1) = 1$

2) Find  $x$  when  $0 \leq x \leq 2\pi$  :  $4 \sin^2 x - 1 = 0$

3) Find  $\theta$  if  $0^\circ \leq \theta \leq 360^\circ$ :  $5 \sin^2 x - 4 \sin x - 1 = 0$

IV) Graph each trigonometric function

1)  $y = \sin 3\theta$     2)  $y = \frac{1}{2} \tan \frac{\theta}{3}$     3)  $y = \frac{1}{2} \sec \theta$     4)  $y = 2 \cos 4\theta$     5)  $y = 2 \csc 2\theta$