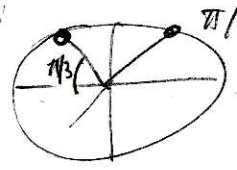


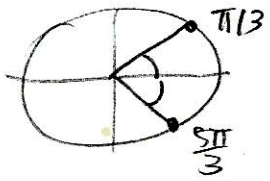
103. $x \in [0, 2\pi]$

a) $\sin x = \frac{\sqrt{3}}{2} \Rightarrow \boxed{x = \pi/3, 2\pi/3}$



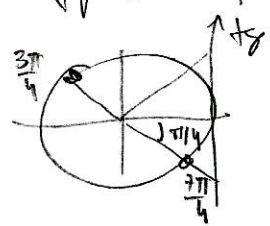
$\pi - \pi/3 = 2\pi/3$

b) $\cos x = \frac{1}{2} \Rightarrow \boxed{x = \pi/3, 5\pi/3}$



$2\pi - \pi/3 = 5\pi/3$

c) $\sin x = -1 \Rightarrow \boxed{x = 3\pi/4, 7\pi/4}$

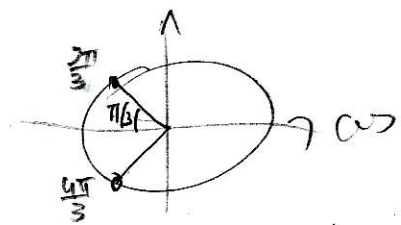


$2\pi - \pi/4 = 7\pi/4$

$\pi - \pi/4 = 3\pi/4$

d) $\sec x = -2$
 $\sec x = \frac{1}{\cos x} = -2$

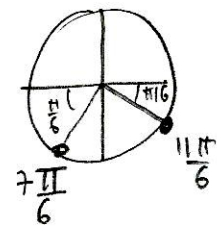
$\cos x = -\frac{1}{2} \Rightarrow \boxed{x = 2\pi/3, 4\pi/3}$



$\pi - \pi/3 = 2\pi/3$

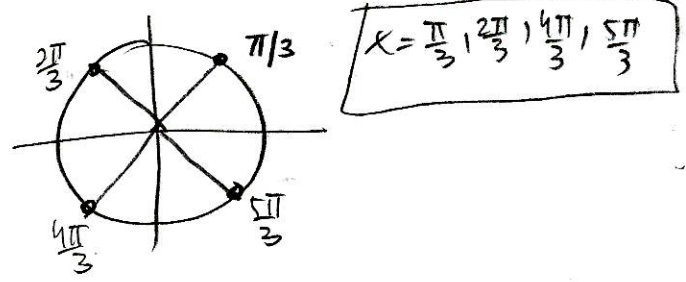
$\pi + \pi/3 = 4\pi/3$

e) $\sin x = -\frac{1}{2} \Rightarrow \boxed{x = 7\pi/6, 11\pi/6}$



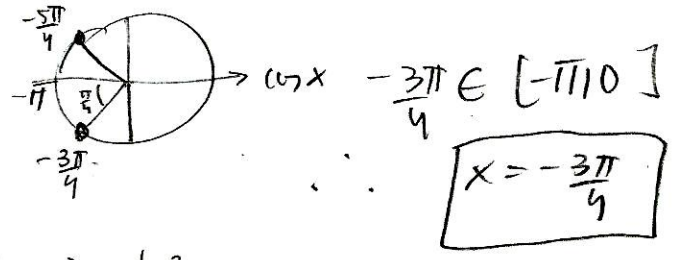
f) $\cos^2 x = \frac{1}{4}$

$\cos x = \pm \frac{1}{2} \Rightarrow$



104. $x \in [-\pi, 0]$

a) $\cos x = -\frac{1}{\sqrt{2}}$



b) $\tan^2 x = \tan x$

$\tan x (\tan x - 1) = 0$

$\Rightarrow \tan x = 0$ or $\tan x = 1$

$\tan x = 0 \Rightarrow \underline{x = 0, -\pi}$

$\tan x = 1 \Rightarrow x = -\frac{3\pi}{4}, -\frac{\pi}{4}$

