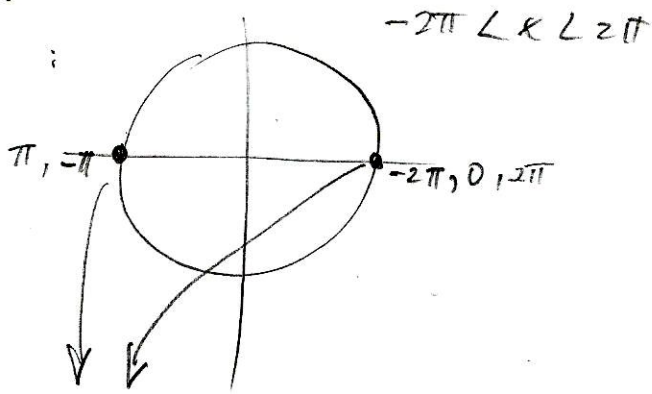


107. Cont.

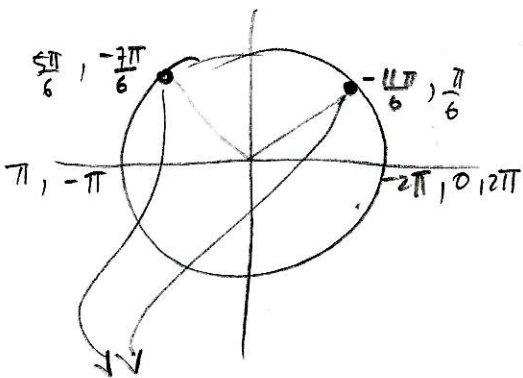


$$\begin{cases} \cos x = 0 \\ \sin x = 0 \end{cases} \Rightarrow \underline{x = -2\pi, -\pi, 0, \pi, 2\pi}$$

$$\sin x = \frac{1}{2}$$

$$-2\pi + \frac{\pi}{6} = -\frac{11\pi}{6}$$

$$-\pi - \frac{\pi}{6} = -\frac{7\pi}{6}$$



$$\sin x = \frac{1}{2} \Rightarrow \underline{x = -\frac{11\pi}{6}, -\frac{7\pi}{6}, \frac{\pi}{6}, \frac{5\pi}{6}}$$

Seluruh :

$$\boxed{x = -2\pi, -\frac{11\pi}{6}, -\frac{7\pi}{6}, -\pi, 0, \frac{\pi}{6}, \frac{5\pi}{6}, \pi, 2\pi}$$

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108.

$$\tan 2x = -\frac{24}{7}$$

$$\frac{2 \tan x}{1 - \tan^2 x} = -\frac{24}{7}$$

$$14 \tan x = -24 + 24 \tan^2 x$$

$$24 \tan^2 x - 14 \tan x - 24 = 0$$

$$12 \tan^2 x - 7 \tan x - 12 = 0$$

$$\tan x = \frac{7 \pm \sqrt{49 - 4 \cdot 12(-12)}}{24}$$

$$= \frac{7 \pm \sqrt{49 + 576}}{24}$$

$$= \frac{7 \pm \sqrt{625}}{24}$$

$$\tan x = \frac{7 \pm 25}{24} \quad \left| \begin{array}{l} \frac{32}{24} = \frac{4}{3} \\ -\frac{18}{24} = -\frac{3}{4} \end{array} \right.$$

Maka

$$\tan x = \frac{\sin x}{\cos x} = \frac{\sin x}{\pm \sqrt{1 - \sin^2 x}}$$

$$\tan^2 x = \frac{\sin^2 x}{1 - \sin^2 x}$$

Se $\tan x = \frac{4}{3}$ maka ,

$$\frac{16}{9} = \frac{\sin^2 x}{1 - \sin^2 x}$$

$$\frac{16}{9} - \frac{16}{9} \sin^2 x = \sin^2 x \rightarrow$$