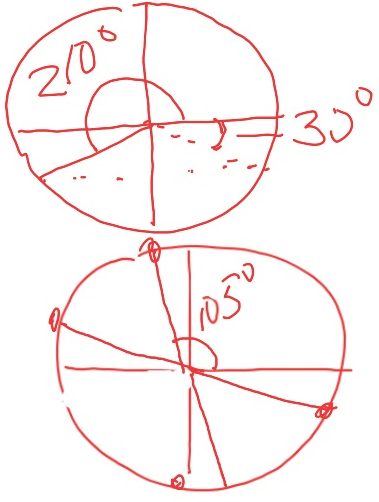
Ejem. a) $4\sin 2x + 2 = 0$

$4\sin 2x = -2 \;/:4$

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



$2x = 210^\circ + n\cdot 360^\circ \;/:2 \quad \vee \quad 2x = (180^\circ - 210^\circ) + n\cdot 360^\circ \;/:2$

$2x = \frac{7\pi}{6} + n\cdot 2\pi \quad \vee \quad 2x = \left(\pi - \frac{7\pi}{6}\right) + n\cdot 2\pi$

$x = 105^\circ + n\cdot 180^\circ \quad \vee \quad x = -15^\circ + n\cdot 180^\circ, \; n\in\mathbb{Z}$

$x = \frac{7\pi}{12} + n\cdot\pi \quad \vee \quad x = -\frac{\pi}{12} + n\cdot\pi, \; n\in\mathbb{Z}$

$-30^\circ \qquad n\in\mathbb{Z}$

$$3\sin^2 x - \frac{1}{3} = 0$$

$$3\sin^2 x = \frac{1}{3} \quad || : 3$$

$$\sin^2 x = \frac{1}{9} \quad || \sqrt{\ }$$

$$\sin x = \pm\sqrt{\frac{1}{9}} = \pm\frac{1}{3}$$

$$\sin x = \frac{1}{3} \quad \vee \quad \sin x = -\frac{1}{3}$$

$$\vdots \qquad\qquad \vdots$$

−47

solve$\left(\sin(x)=\frac{\sqrt{3}}{2}\right)$

$\left\{x=2\cdot\pi\cdot\text{constn}(1)+\frac{\pi}{3},\ x=2\cdot\pi\cdot\text{constn}(2)+\frac{2\cdot\pi}{3}\right\}$

2πn

n n

n

Lankimensa !! $\frac{\pi}{3}+n2\pi$

Esim. $\sin 3x = \sin x$

$3x = x + n\cdot 2\pi \vee 3x = (\pi - x) + n\cdot 2\pi$

$2x = n\cdot 2\pi \,\|:2 \vee 4x = \pi + n\cdot 2\pi \,\|:4$

$x = n\pi \quad \vee \quad x = \frac{\pi}{4} + n\cdot\frac{\pi}{2},\ n\in\mathbb{Z}$

Esim $x = 2\pi\cdot\frac{\text{const}(1)}{3} + \frac{\pi}{18}$

$2\pi\cdot\frac{n}{3}$

$n\cdot\frac{2\pi}{3}$ 120°

2.4 $10° \vee 50° \ (+n\cdot 120°)$

$n=1\ 10°+120° \vee 50°+120°$