

Pers. garis singgung: $y - y_a = a(x - x_a)$
 $y - 0 = 5(x - 0)$

Hasil linierisasi: $y = 5x$
 $y(t) = 5x(t) \rightarrow$ buktikan sistem linier

$\Rightarrow$ Dicoba di-linierisasikan pada $P\left(\frac{\pi}{6}, \frac{5}{2}\right)$

$$a = \left. \frac{df(x)}{dx} \right|_{P\left(\frac{\pi}{6}, \frac{5}{2}\right)} = 5 \cos x = 5 \cos \frac{\pi}{6} = \frac{5}{2} \sqrt{3}$$

Pers. garis singgung: $y - y_p = a(x - x_p)$
 $y - \frac{5}{2} = \frac{5}{2} \sqrt{3} \left(x - \frac{\pi}{6}\right)$
 $y = \left(\frac{5}{2} \sqrt{3}\right)x - \left(\frac{5}{2} \sqrt{3}\right)\frac{\pi}{6} + \frac{5}{2}$