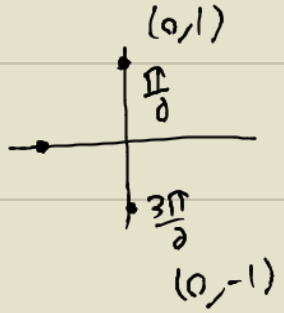
5. $f(x) = 5 - \sin x$

① $f'(x) = \boxed{-\cos x}$

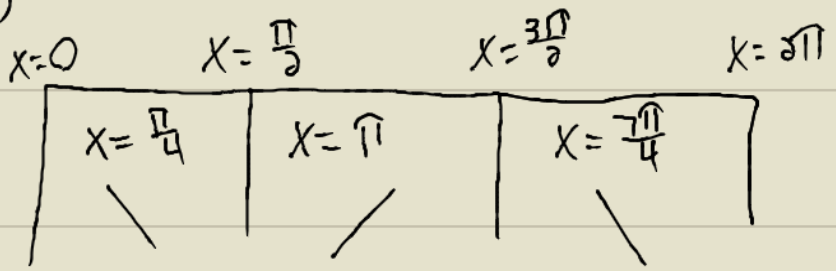
② $-\cos x = 0$

$\cos x = 0$

$x = \frac{\pi}{2}, \quad x = \frac{3\pi}{2}$




③




DEC $(0, \frac{\pi}{2})$

INC $(\frac{\pi}{2}, \frac{3\pi}{2})$

DEC $(\frac{3\pi}{2}, 2\pi)$