Solve $\ln(sinx) - \ln(cosx) = e$, $for\ 0 < x < 2\pi$

$$\ln(sinx) - \ln(cosx) = e$$

$$\log_c a - \log_c b = \log_c \frac{a}{b}$$

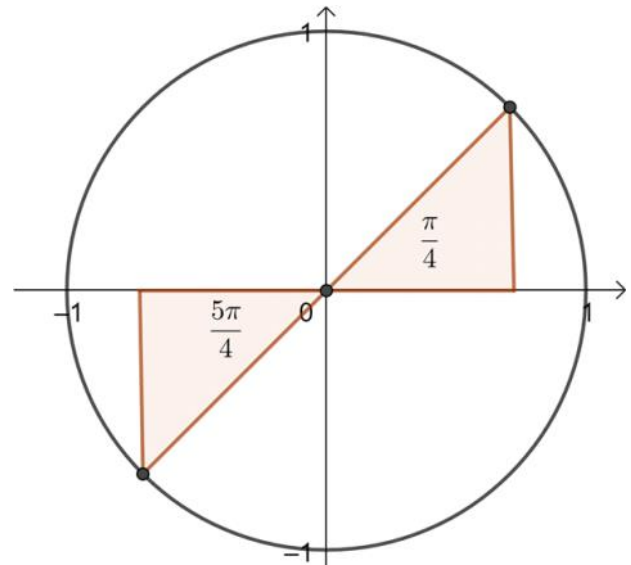$$ln\left(\frac{sinx}{cosx}\right) = e$$

$$\log_e\left(\frac{sinx}{cosx}\right) = e$$

$$\left(\frac{sinx}{cosx}\right) = 1$$

$$\tan x = \frac{sinx}{cosx}$$

$$\tan x = 1$$

$$x = \frac{\pi}{4}, \frac{5\pi}{4}$$