

$$\textcircled{7} \lim_{x \rightarrow 0^+} \sqrt{x} e^{\cos(\pi/x)}$$

$$-1 \leq \cos\left(\frac{\pi}{x}\right) \leq 1$$

$$e^{-1} \leq e^{\cos(\pi/x)} \leq e^1$$

$$\lim_{x \rightarrow 0^+} \sqrt{x} e^{-1} \leq \sqrt{x} e^{\cos(\pi/x)} \leq \sqrt{x} e$$

↓
0

↓
0

↓

by
Squeeze
Theorem

↓
0