

## SORULAR

Aşağıdaki limitleri hesaplayınız.

$$1) \lim_{n \rightarrow 0} \frac{1}{x\sqrt{x}} \left( 5 \tan^{-1} \frac{\sqrt{x}}{5} - 4 \tan^{-1} \frac{\sqrt{x}}{4} \right)$$

$$2) \lim_{x \rightarrow 0} \frac{\ln(\sin mx)}{\ln(\sin nx)}$$

$$3) \lim_{x \rightarrow \frac{\pi}{2}} (\sin x)^{\sec x}$$

$$4) \lim_{x \rightarrow 1} (1 - x^2)^{\frac{1}{\ln(1-x)}}$$

$$5) \lim_{x \rightarrow \infty} \sqrt{x+1} - \sqrt{x}$$