

Evaluate $\lim_{x \rightarrow 0} \frac{\sin x^\circ}{x}$.

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$$\begin{aligned}\lim_{x \rightarrow 0} \frac{\sin x^\circ}{x} &= \lim_{x \rightarrow 0} \frac{\sin\left(\frac{\pi}{180} \cdot x^\circ\right)}{x} \\ &= \lim_{x \rightarrow 0} \frac{\sin\left(\frac{\pi}{180} \cdot x^\circ\right)}{\frac{\pi}{180} \cdot x} \cdot \frac{\pi}{180} \\ &= \frac{\pi}{180}\end{aligned}$$