

$$\begin{aligned} 74. \quad \lim_{x \rightarrow 0} \frac{\sin 2x}{\sin 3x} &= \lim_{x \rightarrow 0} \left[2 \left(\frac{\sin 2x}{2x} \right) \left(\frac{1}{3} \right) \left(\frac{3x}{\sin 3x} \right) \right] \\ &= 2(1) \left(\frac{1}{3} \right) (1) = \frac{2}{3} \end{aligned}$$