

$$\lim_{x \rightarrow 0} \frac{\sin ax}{x} = \{y = ax\} = \lim_{y \rightarrow 0} \frac{\sin y}{\frac{y}{a}} = a \lim_{y \rightarrow 0} \frac{\sin y}{y} = a \ .1$$
$$\lim_{x \rightarrow 0} \frac{\sin \sin x}{\sin x} = \{y = \sin x\} = \lim_{y \rightarrow 0} \frac{\sin y}{y} = 1 \ .2$$