

Question 1

$$\frac{x}{x+2}$$

$$\begin{aligned}(1) \quad \lim_{x \rightarrow 0} \frac{\sin 3x}{2x} &= \lim_{x \rightarrow 0} \frac{\sin 3x}{3x} \cdot \frac{3}{2} \\ &= 1 \cdot \frac{3}{2} \\ &= \frac{3}{2}\end{aligned}$$