

Déterminer $\lim_{x \rightarrow 1} \frac{e^x - e}{x - 1}$.

$$\lim_{x \rightarrow 1} \frac{e^x - e}{x - 1} = \lim_{x \rightarrow 1} \frac{e^x - e^1}{x - 1} = \lim_{x \rightarrow 1} \frac{f(x) - f(1)}{x - 1} = f'(1) = \exp'(1) = e^1 = e.$$