

1. $\lim_{x \rightarrow 0} \frac{\sin mx}{\sin nx}$, where $n \neq 0$.

2. $\lim_{x \rightarrow 0} \frac{\tan x}{x + \sin x}$

3. $\lim_{x \rightarrow \infty} \frac{e^x}{x^3}$

4. $\lim_{x \rightarrow \infty} \frac{\ln \ln x}{\sqrt{x}}$