

Solución

a) $\lim_{x \rightarrow 0} \frac{e^{x^2} - 1}{-x^3 + 5x} = 0$

b) $\lim_{x \rightarrow +\infty} \frac{3x^2}{\ln(x^3 - 3)} = +\infty$

c) $\lim_{x \rightarrow 0} \frac{x - \operatorname{sen} x}{x^3} = \frac{1}{6}$

d) $\lim_{x \rightarrow 0} \frac{x - \ln(x+1)}{x} = 0$

e) $\lim_{x \rightarrow +\infty} \frac{\sqrt[3]{x}}{\ln x} = +\infty$

f) $\lim_{x \rightarrow 2} \left(\frac{4}{x^2 - 4} - \frac{1}{x - 2} \right) = -\frac{1}{4}$