

Exercice 1

Calculer, si elles existent, les limites suivantes :

a) $\lim_{x \rightarrow 0} \frac{1 - \cos(x)}{x^2}$

b) $\lim_{x \rightarrow 0} \frac{\cos^2(x) + \sin(2x) - 1}{x}$

c) $\lim_{x \rightarrow \frac{\pi}{2}} \frac{1 - \sin(x)}{\cos^2(x)}$

d) $\lim_{x \rightarrow 0} \frac{1 - \cos^2(x)}{x \tan(x)}$

e) $\lim_{x \rightarrow 0} \frac{x \sin(x)}{1 - \cos(x)}$

f) $\lim_{x \rightarrow 0} \frac{x \sin(x)}{1 - \cos(x)}$

g) $\lim_{x \rightarrow 0} \frac{\cos(x)}{x}$