

# Limites de fonctions et opérations

## Additions et limites

$$\begin{cases} f(x) = 2x \\ g(x) = -3x \end{cases} \Rightarrow \begin{cases} \lim_{x \rightarrow +\infty} f(x) = \dots \\ \lim_{x \rightarrow +\infty} g(x) = \dots \end{cases} \quad \text{or, } f(x) + g(x) = \dots \quad \text{donc } \lim_{n \rightarrow +\infty} f(x) + g(x) = \dots$$

$$\begin{cases} f(x) = 3x \\ g(x) = -2x \end{cases} \Rightarrow \begin{cases} \lim_{x \rightarrow +\infty} f(x) = \dots \\ \lim_{x \rightarrow +\infty} g(x) = \dots \end{cases} \quad \text{or, } f(x) + g(x) = \dots \quad \text{donc } \lim_{n \rightarrow +\infty} f(x) + g(x) = \dots$$

$$\begin{cases} f(x) = 2x \\ g(x) = -2x \end{cases} \Rightarrow \begin{cases} \lim_{x \rightarrow +\infty} f(x) = \dots \\ \lim_{x \rightarrow +\infty} g(x) = \dots \end{cases} \quad \text{or, } f(x) + g(x) = \dots \quad \text{donc } \lim_{n \rightarrow +\infty} f(x) + g(x) = \dots$$

## Multiplications et limites

$$\begin{cases} f(x) = \frac{1}{x} \\ g(x) = x^2 \end{cases} \Rightarrow \begin{cases} \lim_{x \rightarrow +\infty} f(x) = \dots \\ \lim_{x \rightarrow +\infty} g(x) = \dots \end{cases} \quad \text{or, } f(x) \times g(x) = \dots \quad \text{donc } \lim_{x \rightarrow +\infty} f(x) \times g(x) = \dots$$

$$\begin{cases} f(x) = \frac{1}{x^2} \\ g(x) = x \end{cases} \Rightarrow \begin{cases} \lim_{x \rightarrow +\infty} f(x) = \dots \\ \lim_{x \rightarrow +\infty} g(x) = \dots \end{cases} \quad \text{or, } f(x) \times g(x) = \dots \quad \text{donc } \lim_{x \rightarrow +\infty} f(x) \times g(x) = \dots$$

$$\begin{cases} f(x) = \frac{1}{x} \\ g(x) = x \end{cases} \Rightarrow \begin{cases} \lim_{x \rightarrow +\infty} f(x) = \dots \\ \lim_{x \rightarrow +\infty} g(x) = \dots \end{cases} \quad \text{or, } f(x) \times g(x) = \dots \quad \text{donc } \lim_{x \rightarrow +\infty} f(x) \times g(x) = \dots$$