

103 • $f(x) = \frac{2}{3}x - \frac{1}{3}e^x$

$$\lim_{x \rightarrow -\infty} \left(\frac{2}{3}x \right) = -\infty$$

$$\text{et } \lim_{x \rightarrow -\infty} \left(-\frac{1}{3}e^x \right) = 0 \text{ car } \lim_{x \rightarrow -\infty} e^x = 0$$

$$\text{donc par somme } \lim_{x \rightarrow -\infty} \left(\frac{2}{3}x - \frac{1}{3}e^x \right) = -\infty.$$

• $g(x) = \frac{7x^3 - x + 1}{x} = 7x^2 - 1 + \frac{1}{x}$

$$\lim_{x \rightarrow -\infty} (7x^2 - 1) = +\infty \text{ car } \lim_{x \rightarrow -\infty} x^2 = +\infty$$

$$\text{et } \lim_{x \rightarrow -\infty} \frac{1}{x} = 0$$

$$\text{donc par somme } \lim_{x \rightarrow -\infty} \left(7x^2 - 1 + \frac{1}{x} \right) = +\infty.$$