Calculer les limites suivantes :

$$\lim_{x \to +\infty} -5x^4 + 9x^3 + 3x^2 - 7x + 11 \qquad\qquad \lim_{x \to -\infty} 5x^3 + 8x^2 - x + 17$$

$$\lim_{x \to +\infty} 6x^2 + 2x + 4 - \frac{6}{x-3} \qquad\qquad \lim_{x \to -\infty} x^3 - 8x^2 - 3x + 9 + \frac{3}{\sqrt{x^2+1}}$$

$$\lim_{x \to -\infty} (x^3 + 5x^2 - 3x + 7)(x^2 - 8x - 3) \qquad\qquad \lim_{x \to +\infty} (5x^2 - 4x + 8) \times (-3 + \frac{5}{x})$$

$$\lim_{x \to -\infty} \frac{3x^2 + 6x - 2}{x^2 + 1} \qquad\qquad \lim_{x \to +\infty} \frac{x^3 - 7x - 2}{x^2 + x + 4}$$

$$\lim_{x \to +\infty} \frac{3x - 2}{x^2 + 6x + 25} \qquad\qquad \lim_{x \to -\infty} \frac{-2x^3 + 6x - 7}{x^2 + x + 4}$$

$$\lim_{x \to +\infty} \frac{3x - 2}{x + 9} - \frac{x}{x^2 + 4} \qquad\qquad \lim_{\substack{x \to 1 \\ x < 1}} \frac{3x - 2}{x - 1}$$

$$\lim_{\substack{x \to -2 \\ x > 2}} \frac{x^2 + 9x - 6}{x + 2} \qquad\qquad \lim_{\substack{x \to 1 \\ x < 1}} \frac{7x - 3}{x^2 + x - 2}$$

$$\lim_{\substack{x \to 2 \\ x > 2}} \frac{x^2 - 1}{x^2 - 6x + 8} \qquad\qquad \lim_{x \to 1} \frac{5x - 2}{(x - 1)^2}$$