Calculer la limite lorsque n tend vers $+\infty$ des suites suivantes :

$$u_n = \frac{n^3 + 4n^2 - 8}{5n^2 - n + 2}$$

$$u_n = \frac{-6n^2 + 3n + 7}{5n^2 - 8n + 1}$$

$$u_n = 7^n - 3^n$$

$$u_n = \frac{4^n + 5^n}{2^n - 3^n}$$

$$u_n = 3^{2n} - 10^n$$

$$u_n = 5^{n+2} - 5^{n+1} + 5^n$$

$$u_n = \frac{3^{n+1} - 4^{n+2}}{3^{n-1} - 4^{n+2}}$$

$$u_n = \frac{3^{2n} + (5^n)^2}{2^{4n+7} - 7^{12n}}$$

$$u_n = \frac{\left(\frac{2}{3}\right)^n + \left(\frac{5}{4}\right)^n}{\left(\frac{2}{3}\right)^n - \left(\frac{5}{4}\right)^n}$$

$$u_n = \frac{\left(\frac{2}{3}\right)^{2n} + \left(\frac{4}{5}\right)^{n+1}}{\left(\left(\frac{2}{3}\right)^n\right)^2 - \left(\frac{4}{5}\right)^n}$$