$$- si grau P\left(x\right)=grau Q(x)$$

$$\lim\_{x\to \infty }\frac{4x^{2}+ 4x+5}{2x^{2}+ 12x+9}= \frac{\infty }{\infty }= \frac{4}{2}=2$$

$$\lim\_{x\to \infty }\frac{x^{3}+ 6x+10}{x^{3}+ 3x+2}= \frac{\infty }{\infty }= \frac{1}{1}=1$$