522

a)

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

$$\lim_{n\to\infty} a_n = \lim_{n\to\infty} \frac{n^2+3}{4n^2+2n-1} = \lim_{n\to\infty} \frac{\frac{n^2}{n^2}+\frac{3}{n^2}}{\frac{4n^2}{n^2}+\frac{2n}{n^2}-\frac{1}{n^2}} = \lim_{n\to\infty} \frac{1+\frac{3}{n^2}}{4+\frac{2}{n}-\frac{1}{n^2}} = \frac{1}{4} = 0{,}25$$

→ 0

→ 0