(3)

FÁBIÁN TÍMEA NIKOLETT

RDDZXA

(3) $$\lim_{n\to+\infty} \frac{3n^3-2n^2+3}{2n^2-n+1} = +\infty$$

$$\forall \omega \in \mathbb{R}\ \exists N \in \mathbb{N}_0\ \forall n \in \mathbb{N}_0 \quad \Rightarrow x_n > \omega$$

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

$$= \frac{n^3}{2n^2} = \frac{n}{2} > \omega \Rightarrow n > 2\omega$$

$$N = [2\omega]+1$$