

Question: Calculate $\limsup x_n$ for $x_n = (-1)^n \left(\frac{n+5}{n}\right)$

Question: Find $\liminf A_n$ where:

$$A_n = \begin{cases} 0 \leq x < 1 & n \text{ is odd} \\ 1 \leq x \leq 2 & n \text{ is even} \end{cases}$$