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$$\lim_{x \rightarrow +\infty} \frac{\log(e^x + x^3 - 7x^2 + 1)}{2x + 1} =$$

$$= \lim_{x \rightarrow +\infty} \frac{\log e^x + \log\left(\frac{1}{e^x} + \frac{x^3}{e^x} - \frac{7x^2}{e^x} + \frac{1}{e^x}\right)}{2x + 1} =$$

$$= \lim_{x \rightarrow +\infty} \frac{x}{2x + 1} + \frac{\log\left(1 + \frac{x^3}{e^x} - \frac{7x^2}{e^x} + \frac{1}{e^x}\right)}{2x + 1} =$$

$$= \frac{1}{2}$$