Q1. Find:

i. $\lim\limits_{x\to\infty}\left(x-\ln(3e^x+1)\right)$

ii. $\lim\limits_{x\to 1}x^{1/(1-x)}$

Q2. Sketch $f(x)=\sqrt[3]{x^3-1}$, (**Show the following characteristics:** intersections, increasing/decreasing, Local Extremes, concavity, and inflection points**)**