In each problem determine if the series is convergent or divergent. Explain your answer: just writing down "convergent" or "divergent" will earn 0 points.

1. $\displaystyle\sum_{n=1}^{\infty} \frac{1}{\sqrt{n^3 + 4}}$

2. $\displaystyle\sum_{n=2}^{\infty} \frac{n^3 - 1}{n^4 + 1}$