

8. [8 points] Determine whether the following series converges absolutely, converges conditionally, or diverges. Be sure to fully justify your answer, showing all work and indicating any theorems you use.

$$\sum_{n=1}^{\infty} \frac{(-1)^n}{n + \sqrt{n^2 + 1}}$$

(Circle one): **Converges Absolutely** **Converges Conditionally** **Diverges**