Quiz 4

Instructions

You must take this quiz completely alone. Showing it to or discussing it with anyone else is forbidden. You are permitted to consult the textbook, any materials handed out in class, and any materials on the course websites. You may not consult any external resources, including (but not limited to) Google and WolframAlpha.

Your solutions are due by 11:59 PM on Sunday, March 8 via Gradescope. You should use a fresh sheet of paper for your solutions. Since you have time to revise your solutions, make sure your submitted work is clear and concise. You should try to write solutions that a fellow student would be able to follow.

1. Copy the following sentence and sign it with your name: "I have read and understood the instructions. By submitting my solutions, I agree that I have followed both the instructions and the Berkeley Honor Code."

2. (3 points) Determine whether the series $\sum_{n=1}^{\infty} \left(\sqrt{n^2+2n} - \sqrt{n^2+1}\right)$ converges or diverges.

3. (3 points) Determine whether the series $\sum_{n=0}^{\infty} \frac{\sqrt{n}}{n^3+1}$ converges or diverges.

4. (3 points) Determine whether the series $\sum_{n=2}^{\infty} \frac{1+\cos(n)}{n^3\sqrt{n^2-1}}$ converges or diverges.