

Math 2260 Quiz 17

Name _____

Points will be deducted for untidy or disorganized answers

1. Determine which of the follow series converge absolutely, which converge conditionally, and which diverge. Give reasons for your answer.

(a) (1 point)

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

(b) (1 point)

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

(c) (1 point)

$$\sum_{n=1}^{\infty} \frac{(-3)^n n}{(n+1)^5}$$

(d) (2 points)

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