

**Quiz 6**

MATH 112-017 and 112-019

New Jersey Inst. Tech.

Prof. Nicholas Dubicki

Time Limit: 15 min.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Section: \_\_\_\_\_

1. Prove whether the series converges absolutely, converges conditionally, or diverges. State which technique or techniques you are using.

10

$$S = \sum_{n=0}^{\infty} \frac{\cos(\pi n)}{n^{0.9} + 1}$$