Name:

MATH 231 ED5 / Spring 2010

Quiz 8

Instructions: You have 15 minutes to complete this quiz. No calculators, notes, phones, socializing, or other suspicious behaviors are allowed. Read the problems carefully. Explain your answers and show your work.

Determine whether the sum converges absolutely, converges conditionally, or diverges. If it converges, find the sum if possible:

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

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