

Quiz 5

Math 102, Term 172

NAME:

ID:

Find if the following series are convergent, absolutely convergent, conditionally convergent, or divergent:

1. $\sum_1^{\infty} (1 + \frac{2}{n})^{n^2}$

2. $\sum_1^{\infty} a_n$, where $a_1 = \frac{1}{3}$ and $a_{n+1} = \sqrt{a_n}$.

3. $\sum_1^{\infty} a_n$, where $a_1 = 2$ and $a_{n+1} = \frac{\sqrt[n]{n}}{2} a_n$.

4. $\sum_1^{\infty} \operatorname{sech} n$

5. $\sum_1^{\infty} (-1)^n [\sqrt{n + \sqrt{n}} - \sqrt{n}]$