

<p>Calculus II - Fall 2014 - Mr. Clontz - Quiz 04</p> <p>Fill in the circle for the correct answer for each of the following problems.</p>
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Name: _____ 9am / 10am

1. (10 points) Determine whether the series $\sum_{n=2}^{\infty} \left(\frac{n+1}{2n-3} \right)^n$ converges or diverges.

- ☐ The series converges.
- ☐ The series diverges.

2. (10 points) Determine whether the series $\sum_{n=1}^{\infty} \frac{n!}{4^n}$ converges or diverges.

- ☐ The series converges.
- ☐ The series diverges.

3. (5 points) For what values of x is the series $\sum_{n=1}^{\infty} \frac{(x-3)^n}{n}$ convergent?

- ☐ The series converges for all real numbers.
- ☐ The series converges only when $2 \leq x < 4$.
- ☐ The series converges only when $2 < x \leq 4$.
- ☐ The series converges only when $x = 3$.
- ☐ None of these.