

Calculus II - Monday, August 25, 2014 - Mr. Clontz - Quiz 03  
Fill in the circle for the correct answer for each of the following problems.

Name: \_\_\_\_\_ 9am / 10am

1. (10 points) Determine whether  $\sum_{n=0}^{\infty} \frac{4n}{\sqrt{2n^3 - 1}}$  converges or diverges.

☐ The series converges.

☐ The series diverges.

2. (10 points) Determine whether  $\sum_{n=0}^{\infty} \frac{(-1)^{n-1}}{n^{3/2}}$  converges or diverges.

☐ The series converges.

☐ The series diverges.

3. (5 points) Determine whether or not the series  $\sum_{n=1}^{\infty} \frac{2^{n-1}}{3^n}$  converges or diverges. If it converges, give its sum.

☐ The series converges to  $\frac{3}{2}$ .

☐ The series converges to  $\frac{2}{3}$ .

☐ The series converges to 1.

☐ The series diverges.

☐ None of these.