Name
MATH 181 Calculus and Analytic Geometry II Fall $2009 \quad$ Practice Quiz \#2

1. Find the sum of the series $\sum_{k=1}^{\infty} \frac{(-1)^{k}}{3^{k}}$.
2. State a conclusion about the convergence of the series $\sum_{n=2}^{\infty} \frac{5}{2 n \sqrt{n^{3}-4}}$ and justify that conclusion using a comparison argument.
3. Use the ratio test to reach a conclusion about the convergence of the series $\sum_{k}^{\infty} \frac{k 3^{k}}{k!}$.
