Name: _____

ID #: _____

Quiz 5

1. Decide with full justification whether the series converges:

$$\sum_{n=2}^{\infty} \frac{1}{n\sqrt{n^2-1}}.$$

2. Decide with full justification whether the series converges absolutely, conditionally, or diverges:

$$\sum_{n=2}^{\infty} \frac{(-1)^n}{\sqrt{\ln n}}.$$

3. Decide with full justification whether the series converges absolutely, conditionally, or diverges:

$$\sum_{n=1}^{\infty} \frac{n(-3)^n}{n!}.$$