

**Quiz 4 — 10/6/16**

Answer all questions in a clear and concise manner. Answers that are without explanations or are poorly presented may not receive full credit.

1. Determine whether the series  $\sum_{n=2}^{\infty} \frac{\cos(n\pi)}{\sqrt{n}}$  is convergent or divergent.

2. Determine whether the series  $\sum_{n=1}^{\infty} \frac{(-1)^n}{\sqrt[3]{n^2}}$  converges absolutely, converges conditionally or diverges.