

Name: _____

Panther ID: _____

Worksheet/Quiz 04/02/13 – Due Thursday, 04/04/13 -

Calculus II

To receive credit you MUST SHOW ALL YOUR WORK.

1. Decide whether each of the series below are absolutely convergent, conditionally convergent, or divergent

(a) $\frac{1}{1} - \frac{2}{3} + \frac{3}{5} - \frac{4}{7} + \frac{5}{9} - \frac{6}{11} + \dots$

(b) $\frac{1}{\sqrt{1}} - \frac{1}{\sqrt{2}} + \frac{1}{\sqrt{3}} - \frac{1}{\sqrt{4}} + \dots$

(c) $\frac{1}{2} - \frac{1}{5} - \frac{1}{10} + \frac{1}{17} - \frac{1}{26} - \frac{1}{37} + \dots$

2. Find the interval of convergence for each of the following power series:

$$(a) \sum_{k=1}^{\infty} \frac{(-1)^k (x-2)^{2k+1}}{2k+1}$$

$$(b) \sum_{k=0}^{\infty} \frac{x^k}{k!}$$