

# Math152 - Calculus II - Winter 2005

## Quiz #5, February 14, 2005

In the following problems you are required to show all your work and provide the necessary explanations everywhere to get the full credit.

1. Determine whether the series is convergent or divergent:

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

$$(b) \sum_{k=2}^{\infty} \frac{k^4 + 2k^3 + 2}{k^5 - 2}$$

$$(c) \sum_{k=1}^{\infty} \frac{5^k}{k!}$$