MATH 152   **QUIZ 10A**   NAME_____

Mrs. Bonny Tighe   25 points

                        12.11   Section _____ Wed. 5/3/06

1. Expand each of the following as a power series using the binomial series.   State the

radius and interval of convergence.   a) $\dfrac{x}{\sqrt{1+x}}$

b) $\dfrac{1}{(4-x)}$

2. Use the binomial series to expand a Maclaurin series for $\sin^{-1} x$

3. Use the binomial series to expand $\sqrt[4]{8 - x}$ as a power series and use this to estimate $\sqrt[4]{2.98} \cdot \sqrt[4]{.98}$