

M162x4F06 Part II.	Name:	
7.	Find the interval of convergence of the series $\sum_{n=1}^{\infty} \frac{(-1)^n (x-2)^n}{n 3^n}$ <div style="display: flex; justify-content: space-between;"> Radius of Conv: _____. Interval of Conv: _____. </div>	
8.	Use Maclaurin series of basic functions to find the Maclaurin series for: a) $f(x) = x \cos(x^2)$ Ans: _____	b) $f(x) = \frac{1}{1-3x}$ Ans: _____
9.	Use a power series to approximate the definite integral to 4 decimal places: a) Power series of $\tan^{-1}(x)$ Ans: _____	b) Integral: $\int_0^{1/2} \tan^{-1}(x^3) dx$ Ans: _____
10.	Use the binomial series to find the first 5 non-zero terms of the Maclaurin series for $f(x) = \sqrt{1+x^3}$ a) Series (7 points) Ans: _____	b) Use part (a) to compute $f^{iv}(0)$. (3 points) Ans: _____
Extra Space		