Math 1AA3/1ZB3: Week 7 Tutorial Problems

February 22, 2019

1. Find a power series representation of the following function and determine the interval and radius of convergence:

$$f(x) = \frac{x^2}{3+x^2}$$

- 2. Find the Taylor series centered at x=2 for the function $f(x)=\frac{2}{x}$.
- 3. Find the quadratic Taylor approximation to $f(x) = \frac{2}{x}$ centered at x = 2 and compute error bounds on the intervals (1,3) and (0,4).