

Quiz 1

1. Find the radius of convergence of the series

$$\sum_{n=1}^{\infty} \frac{(-1)^n n^2 (x+2)^n}{3^n}$$

2. Find the recurrence relation and the first 5 non-zero terms in the series solution to

$$y'' - xy' = 0, \quad x_0 = 0$$