

Quiz No. 5, Math 202

Name \_\_\_\_\_ ID \_\_\_\_\_ Section \_\_\_\_\_

1. Find two power series solutions of the differential equation  $y'' + (\sin x)y = 0$  about the ordinary point  $x=0$ .

Q2. Find radius of convergence and interval of convergence of the power series  $\sum_{k=1}^{\infty} \frac{(-1)^k}{5^k} (x - 6)^k$