

MA 182 GROUP WORK (8.5)

NAME \_\_\_\_\_

1. Find the radius and interval of convergence of the series

A. 
$$\sum_{n=0}^{\infty} \frac{x^n}{n3^n}$$

B. 
$$\sum_{n=0}^{\infty} (-1)^n \frac{x^{2n}}{(2n)!}$$

2. Suppose that  $\sum_{n=0}^{\infty} c_n x^n$  converges when  $x = -4$  and diverges when  $x = 6$ . Which of the following series converge?

A.  $\sum_{n=0}^{\infty} c_n$

B.  $\sum_{n=0}^{\infty} c_n 8^n$

C.  $\sum_{n=0}^{\infty} c_n (-3)^n$

D.  $\sum_{n=0}^{\infty} (-1)^n c_n 9^n$