

## EMCF39 – Math 1432, 13209

The answer sheet for this assignment can be found by logging into *CourseWare* at <http://www.casa.uh.edu>, selecting **Math 1432(13209)**, clicking on the **EMCF** tab at the top of the page, and selecting **EMCF39**.

1. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{x^n}{2n+1}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

2. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{(-1)^n x^n}{2^n}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

3. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{(2x)^n}{n^2 + 1}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

4. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{(x-1)^n}{2n+1}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

5. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{(x+2)^n}{3^n}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

6. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{x^n}{n!}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

7. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{x^{2n-1}}{n!}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

8. Give the radius of convergence for  $\sum_{n=0}^{\infty} n!x^n$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

9. Give the radius of convergence for  $\sum_{n=1}^{\infty} \frac{(-1)(x+1)^n}{n2^n}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.

10. Give the radius of convergence for  $\sum_{n=0}^{\infty} \frac{n^2 (x-3)^n}{3n+1}$ .

- a.  $\infty$
- b. 1
- c.  $1/2$
- d. 0
- e. 2
- f. None of these.