

EMCF26 – 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 **EMCF26**.

1. $\left\{ (-1)^n \right\}$

- a. Converges
- b. Diverges

2. $\left\{ \frac{(-1)^n}{n+1} \right\}$

- a. Converges
- b. Diverges

3. $\left\{ \frac{\ln(2n-1)}{n+3} \right\}$

- a. Converges
- b. Diverges

4. $\left\{ \frac{2n-1}{3n+2} \right\}$

- a. Converges
- b. Diverges

5. $\left\{ \frac{3n^2 - 2n + 3}{5n + 100} \right\}$

- a. Converges
- b. Diverges

6. $\left\{ \frac{27n^{73}}{n!} \right\}$

- a. Converges
- b. Diverges

7. $\left\{ \frac{n^n}{n!} \right\}$

- a. Converges
- b. Diverges

8. $\left\{ \frac{n!}{n^n} \right\}$

- a. Converges
- b. Diverges

9. $\left\{ \frac{2^{-n}}{3^{-n}} \right\}$
a. Converges
b. Diverges
10. $\left\{ n(-1)^n \right\}$
a. Converges
b. Diverges
11. $\left\{ \frac{\sin(3n)}{2n+2} \right\}$
a. Converges
b. Diverges
12. $\left\{ \frac{n+2}{\sin(5n)} \right\}$
a. Converges
b. Diverges
13. $\left\{ n \sin(\pi n) \right\}$
a. Converges
b. Diverges
14. $\left\{ \frac{2^n}{10n^9 + 7n^3 + 12} \right\}$
a. Converges
b. Diverges
15. $\left\{ \frac{3^{2n}}{n!} \right\}$
a. Converges
b. Diverges