

**WRITE YOUR NAME:**

**MAC 2312 WRITTEN HOMEWORK #10**

Due Tuesday March 26th, in Canvas

**Question 1.** Determine whether the series converges or diverges.

$$\sum_{n=1}^{\infty} \frac{7n^2 - n - 2}{4n^4 - 3n + 1}$$

**Question 2.** Determine whether the series converges or diverges.

$$\sum_{n=0}^{\infty} \frac{(-7)^n}{n!}$$

**Question 3.** Determine whether the series converges or diverges.

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

**Question 4.** Determine whether the series converges or diverges.

$$\sum_{n=0}^{\infty} \frac{3^{n+4}}{4^{n-2}}$$