

Each problem is worth 0 points. In the event of an actual quiz, you would have received warning.

1. Determine the interval and radius of convergence of the series $\sum_{n=1}^{\infty} (-1)^n \frac{x^n}{n^2 5^n}$.

$$\text{I.o.C.} = [-5, 5] \quad \text{R.o.C.} = 5$$

2. Determine the interval and radius of convergence of the series $\sum_{n=1}^{\infty} \frac{(x+2)^n}{n 4^n}$.

$$\text{I.o.C.} = [-6, 2) \quad \text{R.o.C.} = 4$$

3. Determine the interval and radius of convergence of the series $\sum_{n=1}^{\infty} \frac{2^n (x-2)^n}{(n+2)!}$.

$$\text{I.o.C.} = (-\infty, +\infty) \quad \text{R.o.C.} = \infty$$

4. Determine the interval and radius of convergence of the series $\sum_{n=1}^{\infty} \frac{2^n (x-3)^n}{\sqrt{n+3}}$.

$$\text{I.o.C.} = [2.5, 3.5) \quad \text{R.o.C.} = 1/2$$

5. Determine the interval and radius of convergence of the series $\sum_{n=1}^{\infty} \frac{(-1)^n x^n}{(2n+1)!}$.

$$\text{I.o.C.} = (-\infty, +\infty) \quad \text{R.o.C.} = \infty$$

6. Determine the interval and radius of convergence of the series $\sum_{n=1}^{\infty} (-1)^n \frac{x^n}{n}$.

$$\text{I.o.C.} = (-1, 1] \quad \text{R.o.C.} = 1$$

