

Find the Interval of Convergence for each Power Series.

1. $\sum_{n=0}^{\infty} \left[\frac{x^n}{n!} \right]$

2. $\sum_{n=1}^{\infty} \left[\frac{(-1)^n}{n} \cdot (x - 5)^n \right]$

3. $\sum_{n=1}^{\infty} \left[\frac{(x-2)^n}{(n+1) \cdot 3^n} \right]$

4. $\sum_{n=1}^{\infty} \left[\frac{(x+1)^{2n}}{n!} \right]$

5. $\sum_{n=1}^{\infty} \left[\frac{x^n \cdot 5^n}{n^n} \right]$