

Using the Ratio Test, $\lim_{n \rightarrow \infty} \left| \frac{a_{n+1}}{a_n} \right| = \lim_{n \rightarrow \infty} \left| \frac{(-13)^{n+1}}{(n+1)!} \cdot \frac{n!}{(-13)^n} \right|$

$= \lim_{n \rightarrow \infty} \left| \frac{-13}{n+1} \right| = 0 < 1$, so the series $\sum_{n=0}^{\infty} \frac{(-13)^n}{n!}$ is absolutely convergent.