2. [10 points] A power series centered at $x = 4$ is given by

$$\sum_{n=1}^{\infty} \frac{n+1}{11^n \cdot n^{3/2}}(x-4)^n.$$

The radius of convergence of this power series is 11 (do **not** show this). Find the **interval** of convergence of this power series. Show all your work, including full justification for series behavior.

Interval of convergence: _____