ENGI 3424 Tutorial Example for Series

Find the interval of convergence I for the series

$$\sum_{n=1}^{\infty} u_n = \sum_{n=1}^{\infty} \frac{1}{n} \left(\frac{4}{x-3} \right)^{n/3}$$

Note that this is *not* a standard Taylor series, unless one adopts the change of variables

$$z = \left(\frac{4}{x-3}\right)^{1/3}.$$