

Homework Set 17

(sect 8.4: Root Test)

Use the root test to determine whether each series is convergent or divergent.

$$\sum \left(\frac{2n+1}{n-7} \right)^{n/2}$$

$$\sum \left(\frac{n+1}{3n-1} \right)^n$$

$$\sum \left(\frac{2n-5}{2-3n} \right)^{3n}$$

$$\sum \frac{4^{3n}}{n^n}$$

$$\sum \frac{5^{n/2}(-n)^{4n}}{(1+e^n)^n}$$

$$\sum (\sqrt[n]{n} + 2)^n$$