

(11.8) Power Series

Full Name: _____

1. Find the open interval of convergence for each power series. Show your work.

(a)
$$\sum_{n=0}^{\infty} \frac{3^n x^n}{n^3 + 10}$$

(b)
$$\sum_{n=1}^{\infty} \frac{(x+2)^n}{n^2 3^n}$$

(c)
$$\sum_{n=1}^{\infty} \frac{5^{n+1}(x-3)^n}{n 10^n}$$

(d)
$$\sum_{n=0}^{\infty} \frac{(-4)^n x^n}{n!}$$