

Worksheet #10

Find the radius and interval of convergence of the series.

$$(1) \sum_{n=1}^{\infty} \frac{(2x-1)^n}{5^n \sqrt{n}}$$

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

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

$$(4) \sum_{n=1}^{\infty} n!(2x-1)^n$$