

Math 1B Discussion Problems 7 Mar

1. Determine whether each of the following series converges or diverges.

(a) $\sum_{n=1}^{\infty} (-1)^n \frac{1}{\sqrt{n}}$

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

(c) $\sum_{n=1}^{\infty} \frac{2^n}{n!}$

(d) $\sum_{n=1}^{\infty} \frac{n^4}{4^n}$

(e) $\sum_{n=1}^{\infty} \left(\frac{4n+3}{3n-5}\right)^n$

(f) $\sum_{n=1}^{\infty} \frac{8}{(3+(1/n))^{2n}}$