

Review 1 Answers

1. (a) $1/2$.
(b) 0 .
(c) 1 .
(d) $1/2$.
(e) 0 .
2. (a) diverges.
(b) converges.
(c) diverges.
(d) converges.
(e) converges.
3. (a) converges conditionally.
(b) converges absolutely, $-1/3$.
4. (a) $[-1, 1)$.
(b) $(-2, 2]$.
5. (a) $\sum_{n=0}^{\infty} \frac{(-1)^n x^{2n}}{n!}$.
(b) $\sum_{n=1}^{\infty} \frac{x^n}{n}$.
(c) $\sum_{n=0}^{\infty} \frac{(-1)^n 2^{2n+1}}{(2n+1)!(2n+2)} x^{2n+2}$.
- 6.
7. 0.9 .
8. $1/4!$.