

Answers to Week 7 Week in Review

Section 7.8

1.

(a) $\frac{1}{3}$

(b) $\frac{1}{9}$

(c) $\frac{1}{2}(\ln(2) + 1)$

(d) $\frac{\ln(2)}{2}$

(e) diverges

Section 11.1

1.

(a) 0

(b) e^6

(c) $\frac{\pi}{4}$

(d) $\frac{\pi}{2}$

(e) 0

2. $\frac{1}{2}$

3. decreasing for $n \geq 3$; bounded above by $\frac{\ln(2)}{2}$ and below by 0

4. $\frac{1 + \sqrt{13}}{2}$

5. $\frac{a_{n+1}}{a_n} < 1$ when $n > 1000$. Sequence converges to 0!!!