

Math 2260 Quiz 13.5 (Practice)

Name _____

Points will be deducted for untidy or disorganized answers

1. Which of the following sequences converge, and which diverge? Find the limit of each convergent sequence.

(a) $a_n = \frac{n + (-1)^n}{2n + 1}$

(b) $b_n = \frac{\ln(n^2)}{n}$

(c) $c_n = (1 + 3n)^{1/n}$

(d) $d_n = \frac{\ln(2 + e^n)}{3n}$

(e) $e_n = \frac{1 \cdot 3 \cdot 5 \cdots (2n - 1)}{(2n)^n}$

(f) $f_n = \frac{1 \cdot 3 \cdot 5 \cdots (2n - 1)}{n!}$