Name: _____

Quiz 17

MATH 201
April 3, 2025

1. Does the sequence $\left\{ n \sin\left(\frac{3}{n}\right) \right\}_{n=1}^{\infty}$ converge or diverge? If it converges, find the limit.

2. Does the series $\sum_{k=0}^{\infty} \frac{2}{\pi^k}$ converge or diverge? If it converges, find the sum.

Name: _____

Quiz 17

MATH 201
April 3, 2025

1. Does the sequence $\left\{ \dfrac{4n + 7e^n}{n - 3e^n} \right\}_{n=1}^{\infty}$ converge or diverge? If it converges, find the limit.

2. Does the series $\displaystyle\sum_{k=0}^{\infty} \frac{5}{(-6)^k}$ converge or diverge? If it converges, find the sum.