Quiz #9

MATH 126-101 — Calculus II
Thursday, Nov 12, 2026

Please print your name:

Problem 1. (3 points) Write down the geometric series. When does it converge, and what does it converge to?

geometric series	= what it converges to	provided that: condition for convergence

Problem 2. (2 points) Write down the p-series. When does it converge?

p-series	provided that: condition for convergence

Problem 3. (5 points) Determine whether the following series converge or diverge. Make sure to indicate a reason!

(a) $\displaystyle\sum_{n=1}^{\infty} \frac{n+1}{n^3+1}$

☐ series converges ☐ series diverges

Indicate a reason:

(b) $\displaystyle\sum_{n=2}^{\infty} \frac{n+\sqrt{n}+7}{3n^2+1}$

☐ series converges ☐ series diverges

Indicate a reason:

(c) $\displaystyle\sum_{n=2}^{\infty} \frac{1-\ln(n)}{1+\ln(n)}$

☐ series converges ☐ series diverges

Indicate a reason:

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