Quiz #8

MATH 126-102 — Calculus II
Thursday, Nov 5, 2026

Please print your name:

Problem 1. (10 points) Determine the value of the following series or state that they diverge.
(Show your work where necessary!)

(a) $\displaystyle\sum_{n=0}^{\infty} \left(\frac{4}{5}\right)^n =$

(b) $\displaystyle\sum_{n=2}^{\infty} 2^{-n} =$

(c) $\displaystyle\sum_{n=0}^{\infty} \frac{3^n - 2^n}{4^n} =$

(d) $\displaystyle\sum_{n=0}^{\infty} \frac{3^n - 5^n}{4^n} =$

(e) $\displaystyle\sum_{n=0}^{\infty} \frac{7n^2 + 3n}{5n^2 + 1} =$

(extra space for work as needed)

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