

# Cal Poly Department of Mathematics

## Puzzle of the Week

Apr 10 - 16, 2009

We all know the harmonic series  $\sum_{n=1}^{\infty} \frac{1}{n}$  diverges. What if we removed all the terms with a 9 in the denominator (in its decimal expansion)... would the new series be convergent or divergent?

*Solutions should be submitted to Morgan Sherman:*

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*before next Friday. Those with correct and complete solutions will have their names listed in next week's email announcement. Anybody is welcome to make a submission.*