

WMU Math Club
Math Challenge Problem
October 2022

The Problem.

Call a 3-digit number *geometric* if it has 3 distinct digits which, when read from left to right, form a geometric sequence. Find the difference between the largest and smallest geometric numbers.

Instructions.

1. Solve the problem.
2. Type your solution to the problem, preferably in $\text{T}_{\text{E}}\text{X}/\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$.
3. Email your solution to `david.richter@wmich.edu` before November 1, 2022.

More Information. If you submit the best solution, then your solution will be posted here next month, you will be recognized as the winner during the next meeting of the WMU Math Club, and you will receive a prize (probably a book). All undergraduate and graduate students may submit solutions. Please make contact with Prof. David Richter if you have any questions.