

Math 210 - Dr. Miller - Activity #8: Place Value Clue Problems

Clue problems are a great way to reinforce terminology, strengthen critical thinking, and foster creative problem solving. Ours will be more challenging than the children's sample, in that many answers are possible.

1. If possible, find three different Hindu-Arabic numerals that satisfy this set of clues. Show clear work.
 - (*) There are no digits in the hundred millions position or higher.
 - (*) The digits in the thousands period add up to 5, and these digits are different.
 - (*) The digits in the 10^1 and ten thousands positions are equal, and odd.
 - (*) The 10^6 position shows the digit 7.
 - (*) The numeral contains three 8s.

2. Now find three different Hindu-Arabic numerals, if possible, for this list of clues:

- (*) There are no digits in the millions position or higher.
- (*) The digits in the thousands period add up to 5, and two of them are the same.
- (*) The digit in the 10^0 position is odd and is 1 more than that in the thousands position.
- (*) The numeral contains two 7s.