

Math 310 - Dr. Miller - Activity #7: Decimal Clues

1. Find all possible numbers that satisfy the following collection of clues:
 - The digit in the 10^{-1} position is a third of that in the tens position.
 - The digit in the 10^0 position is three less than the digit in the tens position.
 - The digit in the 10^{-2} position is 5 more than that in the tenths position.
 - No digits appear in the thousandths position or smaller.
 - No digits appear in the 10^2 position or higher.

2. Find *all* possible numbers that fit the set of clues below:

- The digit in the 10^0 position is one less than that in the tenths position.
- The digit in the 10^{-2} position is odd.
- Rounded to the nearest ten, the number is 430.
- The number has no digits in the 10^{-3} or lower positions.
- The digit in the 10^{-1} position is twice that in the hundredths position.