4. [6 pts] Find a decimal number that satisfies all of the following clues:
   - The digit in the hundreds position is one more than that in the \(10^{-1}\) position.
   - The digit in the tenths position equals that in the \(10^0\) position.
   - There are no digits in the hundredths position or smaller.
   - The ones digit is odd.
   - Rounded to the nearest ten, the number equals 700.

\[
\begin{array}{c|c|c}
60 & 9 \boxed{5} & 5 \\
\hline
70 & 60 & 5 \\
\end{array}
\]

5. [5 pts] Find a rational number that is between \(2/3\) and 0.667.

\[
0.6666\ldots
\]

\[
0.667
\]

\[
0.6667 \\
0.6668 \\
0.6669
\]

Are all correct.

6. (a) [2 pts] Perform the following division entirely by hand: \(0.07 \div 3.5\)

\[
\begin{array}{c|c}
3.5 & 0.07 \\
\hline
& 70 \\
\end{array}
\]

(b) [4 pts] Verbally explain how you positioned the decimal point in the quotient, and why.

It goes above that in the dividend to indicate "sharing" division.

(you get the same type of answer as what you were separating: \(8\) hundredths.

7. [5 pts] Without counting, use place value to explain what the right-most position in the product \(1.234 \times 0.56789\) must be.

We're multiplying a number having a thousandths position times one having a hundred thousandth position. The product must have a

\[
\frac{1}{1000} \times \frac{1}{100,000} = \frac{1}{100,000,000} \text{ (hundred millionths)
}
\]