

Large Division - Area Method

example: $3822 \div 7$

↑ ↑
Dividend Divisor

1. Draw a rectangle
2. Put the dividend inside the rectangle & the divisor on the outside
3. Put a line under the first digits until it is larger than the divisor. Put dots under the rest.

$$7 \left[\begin{array}{r} 3822 \\ \underline{\quad} \end{array} \right]$$

4. Divide the underlined number by the divisor.
5. Put the quotient on top of the rectangle.
For every dot put a zero.

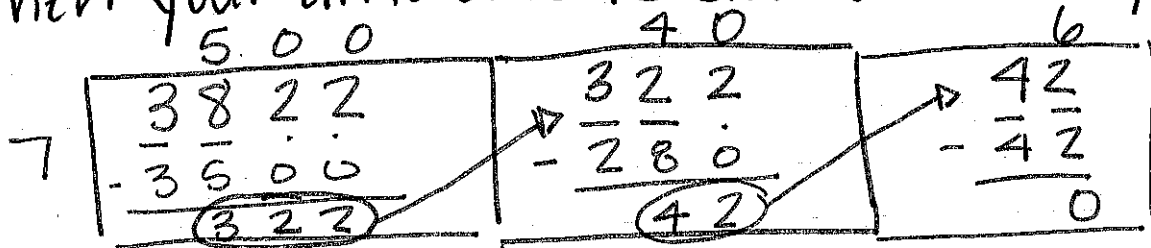
$$7 \left[\begin{array}{r} 500 \\ \underline{38}22 \\ \quad \end{array} \right]$$

- b. multiply quotient \times divisor. Subtract product from your dividend.

$$7 \left[\begin{array}{r} 500 \\ \underline{38}22 \\ - \underline{35}00 \\ \hline 322 \end{array} \right]$$

Continued →

7. Make a new rectangle. Put the difference in this rectangle \rightarrow repeat the steps. Stop when your difference is smaller than your divisor.



8. Add the numbers on the top of the rectangle

$$\begin{array}{r} 500 \\ 40 \\ + 6 \\ \hline 546 \end{array}$$