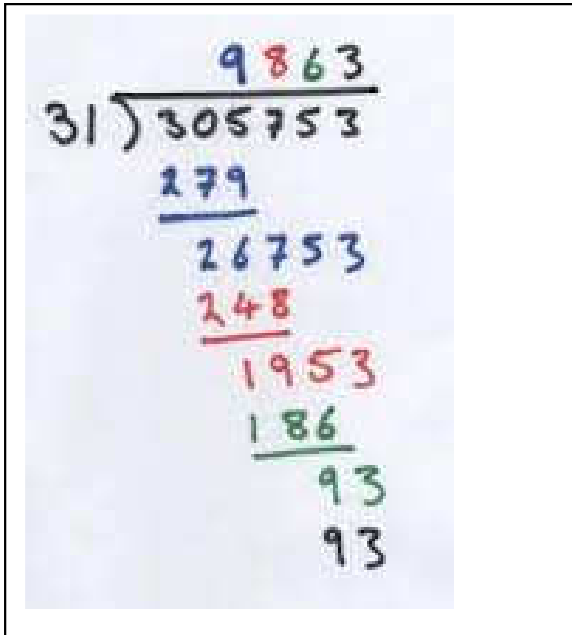


So what is long division really?

The long division on the left contains all the info in the right hand column.

It is actually a picture of the RESULTS of the numerical thinking that occurs when performing the operation. It does not include the entire thought process.


$$\begin{array}{r} 9863 \\ 31 \overline{) 305753} \\ \underline{279} \\ 26753 \\ \underline{248} \\ 1953 \\ \underline{186} \\ 93 \\ 93 \end{array}$$

$$305753 = 179000 + 26753$$

$$305753 = 31(9000) + 26753$$

$$305753 = 31(9000) + 24800$$

$$305753 = 31(9000) + 31(800) + 1953$$

$$305753 = 31(9000) + 31(800) + 1860 + 93$$

$$305753 = 31(9000) + 31(800) + 31(60) + 93$$

$$305753 = 31(9000) + 31(800) + 31(60) + 31(3)$$

$$305753 = 31(9000 + 800 + 60 + 3)$$

$$305753 = 31(9863)$$

$$\frac{305753}{31} = 9863$$