Finding Greatest Common Factor (GCF) and Least Common Multiple (LCM) for 2 numbers

Find the GCF and LCM of 36 and 90

Step 1:   Think of <u>any</u> number that will divide into 36 and 90 evenly—
             doesn't have to be prime   "2" will work

Step 2:   Divide 2 into 36 and 90 ---- write the answer below them

$$2 \enspace \begin{array}{|ll} 36 & 90 \\ \hline 18 & 45 \end{array}$$

Step 3:   Now is there any number that will divide into 18 and 45 evenly?
                 Yes, 9

Step 4:   Divide 9 into 18 and 45 and write the answer under them

$$\begin{array}{l|ll} 2 & 36 & 90 \\ 9 & 18 & 45 \\ \hline & 2 & 5 \end{array}$$

Step 5: Now is there any number that will divide into 2 and 5 evenly? No,
             then you are finished.

Step 6: GCF -- If you multiply what is in the left column (2,9) you have
             the GCF.   GCF = 9 x 2 = 18

Step 7: LCM --- If you multiply the numbers in the left column (2, 9) and
             the numbers that are left over (2, 5) you will have the LCM.
                 LCM = 2 x 9 x 2 x 5 = 180