Division

Order in which Long Division should be worked:

1) Divide
2) Multiply
3) Subtract
4) Check
5) Bring down
6) Repeat

Example 1:

Example 2:

	$5\overline{)65}$	
1) Divide:	$\begin{array}{r} 1 \\ 5\overline{)65} \end{array}$	6 ÷ 5 = 1
2) Multiply:	$\begin{array}{r} 1 \\ 5\overline{)65} \\ \underline{5} \end{array}$	5 x 1 = 5
3) Subtract:	$\begin{array}{r} 1 \\ 5\overline{)65} \\ \underline{-5} \\ 1 \end{array}$	6 – 5 = 1
4) Check:	$\begin{array}{r} 1 \\ 5\overline{)65} \\ \underline{5} \\ 1 \end{array}$	1 < 5 If not, go back **up** to step 1.
5) Bring down:	$\begin{array}{r} 1 \\ 5\overline{)65} \\ \underline{5} \\ 15 \end{array}$	
1) Divide:	$\begin{array}{r} 13 \\ 5\overline{)65} \\ \underline{5} \\ 15 \end{array}$	15 ÷ 5 = 3
2) Multiply:	$\begin{array}{r} 13 \\ 5\overline{)65} \\ \underline{5} \\ 15 \\ \underline{15} \end{array}$	5 x 3 = 15
3) Subtract:	$\begin{array}{r} 13 \\ 5\overline{)65} \\ \underline{5} \\ 15 \\ \underline{-15} \\ 0 \end{array}$	15 – 15 = 0

	$3\overline{)234}$	
1) Divide:	$\begin{array}{r} 7 \\ 3\overline{)234} \end{array}$	23 ÷ 3 = 7
2) Multiply:	$\begin{array}{r} 7 \\ 3\overline{)234} \\ \underline{21} \end{array}$	3 x 7 = 21
3) Subtract:	$\begin{array}{r} 7 \\ 3\overline{)234} \\ \underline{-21} \\ 2 \end{array}$	23 – 21 = 2
4) Check:	$\begin{array}{r} 7 \\ 3\overline{)234} \\ \underline{21} \\ 2 \end{array}$	2 < 3 If not, go back **up** to step 1.
5) Bring down:	$\begin{array}{r} 7 \\ 3\overline{)234} \\ \underline{21} \\ 24 \end{array}$	
1) Divide:	$\begin{array}{r} 78 \\ 3\overline{)234} \\ \underline{21} \\ 24 \end{array}$	24 ÷ 3 = 8
2) Multiply:	$\begin{array}{r} 78 \\ 3\overline{)234} \\ \underline{21} \\ 24 \\ \underline{24} \end{array}$	3 x 8 = 24
3) Subtract:	$\begin{array}{r} 78 \\ 3\overline{)234} \\ \underline{21} \\ 24 \\ \underline{-24} \\ 0 \end{array}$	24 – 24 = 0