

Grade 7/8 Math **Long Division Review and Practice**

Name: _____

Show all work for the following using the example.

Example – $3136 \div 4$

Always write the following down if you do not remember how to do all the steps:

D M S B

Re-write the question:

$$\begin{array}{r} \\ 4 \overline{) 3136} \end{array}$$

1) The first step is to **Divide** -to see if the 4 will go into the first number. In this case it is a 3 and will not so you have to use the first two numbers which is 31. Ask yourself how many times 4 will go into 31. This will be a good time to write out the multiples of 4 (4, 8, 12, 16, 20, 24, 28, 32). Be careful not to make mistakes because it will make your answer wrong.

From the multiple list, we see that 28 is the highest we can go and if we count along, we know that it is the 7th multiple so we know that we can get 7 4's out so we put that on top like this:

$$\begin{array}{r} 7 \\ 4 \overline{) 3136} \end{array}$$

We make sure that it is just above the last digit that it 'went into'.

2) The second step is to **Multiply** – find out how much we too away – Multiply the number we just got (7) by the outside number (4) and put the answer (28) below the number inside:

$$\begin{array}{r} 7 \\ 4 \overline{) 3136} \\ 28 \end{array}$$

3) The third step is to get the difference by **Subtracting** the two numbers ($31 - 28$) and put the answer below:

$$\begin{array}{r} 7 \\ 4 \overline{) 3136} \\ 28 \\ \underline{3} \end{array}$$

4) The next step is to **Bring** down the next number

$$\begin{array}{r} 7 \\ \underline{4) 3136} \\ 28 \\ \underline{33} \end{array}$$

Now that we are through the

D, M, S, B again by using the number at the bottom (33). 4 goes into 33 – 8 times so you put 8 up top above the 3 column

$$\begin{array}{r} 78 \\ \underline{4) 3136} \\ 28 \\ \underline{33} \end{array}$$

Keep going by following the steps of D, M, S, B above> (your answer should be 784)

Try the following:

$$3136 \div 8$$

$$3136 \div 2$$

$$3135 \div 5$$

$$54920 \div 5$$