

Long Division with 4-Digit Numbers

$$\begin{array}{r}
 \text{th h t o} \\
 \underline{2} \\
 2 \overline{) 5718} \\
 \underline{-4} \\
 1
 \end{array}$$

$$\begin{array}{r}
 \text{th h t o} \\
 \underline{28} \\
 2 \overline{) 5718} \\
 \underline{-4} \\
 17 \\
 \underline{-16} \\
 1
 \end{array}$$

$$\begin{array}{r}
 \text{th h t o} \\
 \underline{285} \\
 2 \overline{) 5718} \\
 \underline{-4} \\
 17 \\
 \underline{-16} \\
 11 \\
 \underline{-10} \\
 1
 \end{array}$$

$$\begin{array}{r}
 \text{th h t o} \\
 \underline{2859} \\
 2 \overline{) 5718} \\
 \underline{-4} \\
 17 \\
 \underline{-16} \\
 11 \\
 \underline{-10} \\
 18 \\
 \underline{-18} \\
 0
 \end{array}$$

Check:

$$\begin{array}{r}
 2859 \\
 \times \quad 2 \\
 \hline
 \end{array}$$

Long division works the same way as with smaller numbers.

If the divisor does not "go into" the thousands digit, then combine the thousands with the hundreds, and in effect look at the **first two digits**.

You can place a zero in the quotient in the thousands place.

Basically you only need to divide hundreds, tens, and ones.

Complete the division on the right. Then check your answer by multiplying.

$$\begin{array}{r}
 \hline
 6 \overline{) 4134} \\
 \hline
 \end{array}$$

Check:

1. Divide. Check each division result with multiplication.

a.

$$\begin{array}{r}
 \hline
 3 \overline{) 7041} \\
 \hline
 \end{array}$$

b.

$$\begin{array}{r}
 \hline
 4 \overline{) 9240} \\
 \hline
 \end{array}$$