Long division

From: A Maths Dictionary for Kids by Jenny Eather at www.amathsdictionaryforkids.com

To divide larger numbers a horizontal algorithm is used with a special division symbol often called the division bracket.

**Long Division Steps**

Repeat the first four steps as often as necessary.

1. **D**ivide
2. **M**ultiply
3. **S**ubtract
4. **B**ring next digit down

**Example**

\[
\begin{array}{c}
\text{21) 25738} \\
\text{-21} \\
\text{47} \\
\text{-42} \\
\text{53} \\
\text{-42} \\
\text{118} \\
\text{-105} \\
\text{13}
\end{array}
\]

\[
\begin{array}{c}
\text{1225.619} \\
\text{21) 25738.0000} \\
\text{1225.62} \\
\text{21) 25738.0000}
\end{array}
\]

The final remainder may be written as a fraction or decimal fraction, whole number(s) after the letter R or may be used to round the quotient (answer) to a whole number.

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