Strategies for Arithmetic Operations

Our math program supports students in understanding math. We want students to be able to add, subtract, multiply and divide. We also want them to know how to reason, solve problems and apply math in real-life situations.

Based on students' needs, teachers can teach strategies to help build students' confidence and skill in problem solving.

What are strategies?

Strategies are meaningful steps students take to solve problems. Students refine their strategies as they continue to develop mathematically to become more efficient and skilled at solving problems.

There are different ways to record the steps for each operation. What's important is that students understand the math behind the steps. To help develop understanding, connections should be made to place value, base-ten concepts and number properties.

Samples

Some methods for recording steps may be familiar and others may be new. Here are some examples of strategies for addition.

$$645 + 230 = ?$$

$$\begin{array}{r}
 645 \\
 + 230 \\
 \hline
 875
 \end{array}$$

$$\Rightarrow$$
 645 + 230 = 875

$$645 + 230 = ?$$

$$600 + 200 = 800$$

$$40 + 30 = 70$$

$$5 + 0 = 5$$

$$800 + 70 + 5 = 875$$

$$\Rightarrow$$
 645 + 230 = 875

$$645 + 230 = ?$$

$$645 + 200 = 845$$

 $845 + 30 = 875$

$$\Rightarrow$$
 645 + 230 = 875