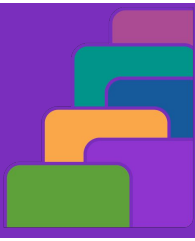
IM K–5 MATH™ v.1

Unit 3

Wrapping Up Addition and Subtraction Within 1,000

3



Lesson 6

Use Strategies and Algorithms to Add

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Kendall Hunt

Learning Goal

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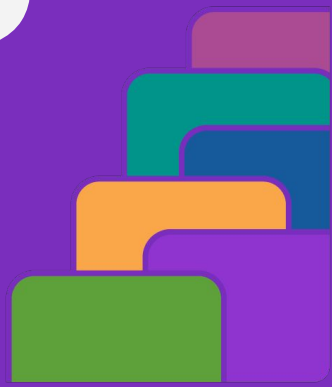
Let's consider when to use algorithms and when to use other strategies to add.



Number Talk

Find the value of each expression mentally.

- 300 + 156
- 299 + 156
- 303 + 156
- 204 + 376

Just Ones

Two methods of recording the addition of 657 + 286 are shown.

Method 1

$$\begin{array}{r} {\scriptstyle 1\ \ 0\ \ 0} \\ {\scriptstyle \ \ \ 1\ \ 0} \\ 6\ 5\ 7 \\ +\ 2\ 8\ 6 \\ \hline 9\ 4\ 3 \end{array}$$

Method 2

$$\begin{array}{r} {\scriptstyle 1\ \ 1\ \ \ } \\ 6\ 5\ 7 \\ +\ 2\ 8\ 6 \\ \hline 9\ 4\ 3 \end{array}$$

How is the newly composed ten and hundred recorded differently in each method?

Try the second method of recording to add these numbers:

a. 602 + 179

b. 493 + 161

c. 438 + 364

d. 329 + 381

- A newly composed unit can be recorded with a single digit. What does the single digit represent?
- How does place value help us remember what the additional ones represent?

How Would You Add?

Launch

- We've been learning about addition algorithms for the last few lessons. Recall that an algorithm is a set of steps that works every time as long as the steps are carried out correctly.
- You know lots of ways to add numbers and lots of representations for showing your work like base-ten diagrams, number lines, and writing words or equations. If it's not a set of steps that would work every time, we call it a strategy.

How Would You Add?

Use a strategy of your choice to find the value of each sum. Show your reasoning. Organize it so it can be followed by others.

1. 199 + 348
2. 264 + 359
3. 203 + 75
4. 316 + 198
5. 399 + 499

How Would You Add?

Activity Synthesis

What strategies or algorithms do you want to practice more?

Use Strategies and Algorithms to Add

Lesson Synthesis

Today we saw how we can use algorithms and other strategies to add. After hearing what other students chose to use, what are your thoughts about choosing when to use an algorithm or another strategy?

Algorithm or Another Strategy?

Cool-down

Would you use an algorithm or another strategy to find the value of 299 + 179?

Explain your reasoning.