

## 5A Chapter 1 Whole Numbers

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Throughout Dimensions Math® 5, students are expected to be able to add and subtract two-digit numbers and multiply a two-digit number by a one-digit number mentally. They should also be able to apply place-value concepts to the mental math strategies. For example, they should be able to calculate  $92,000 - 45,000$  and  $14,000 \times 4$  mentally. It is possible that some students can do these types of calculations mentally by Grade 5, regardless of what curriculum they used previously. Some strategies are provided in the thought bubbles of the characters.

For more practice with mental math strategies for Chapter 1, Lesson 4 and to learn some additional strategies that will be useful for Chapter 2, use:

### Transition Guide Lessons

- **5A.1.1A** Add or Subtract Numbers Close to Thousands
- **5A.1.1B** Mental Math for Multiplication
- **5A.1.1C** Mental Math for Division

The strategies in these lessons, such as “make a 10” or “subtract from a 10,” will be useful in adding or subtracting numbers in other “bases,” such as time, measurements in compound units, and fractions.

Encourage students to use mental math when they can, even in situations where they have not expressly been taught a specific strategy. However, if they are uncomfortable with using mental math for any problem, they can use the algorithms. Sometimes a quick written process is faster than trying to come up with a mental math strategy.

**Note:** The transition lessons and the worksheets for mental math strategies include number bonds. Students should not have much difficulty understanding them, even if they have not seen number bonds before. It is likely sufficient to explain them if needed as students work through one of the lessons. For example, on page 14 of the Textbook, Dion is thinking of a strategy where he splits 43 into two parts, 40 and 3. 43, 40, and 3 is a number bond. When they see the number bond with a missing part on the worksheet, explain that they need to find the other number, which they can do mentally using subtraction. Alternately, see the suggestions in this Guide for 3A Chapter 2.