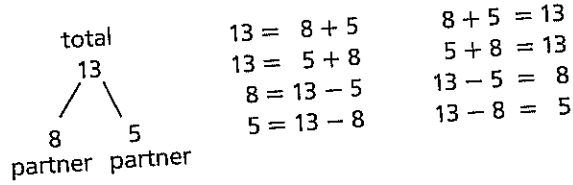


Using Math Tools to Represent Word Problems

Student should be encouraged to use a variety of solution strategies for the word problems in this unit. However, the lessons do present math tools that are useful for organizing the information in the problems and finding the solution. These tools become especially important when the focus shifts later in this unit, from word problems with single-digit numbers to those with multi-digit numbers.

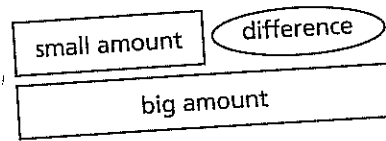
Math Tool: Math Mountains

Students use Math Mountains to show a total and two partners. The total is written at the top of the mountain, and the partners are written at the bottom. Students can imagine that the total splits into two parts that roll down opposite sides of the mountain. Eight equations can be written for a given Math Mountain.



Math Tools: Comparison Bars

Comparison problems involve one quantity that is more than or less than another quantity. The unknown in a comparison problem may be the smaller quantity, the larger quantity, or the difference between quantities. Making Comparison Bars can help students organize the information in the problem and figure out how to find the unknown.



To solve a particular comparison problem, students must ask themselves: *Who has more (or fewer)?* and *How many more (or fewer)?* They can use this information to label a set of Comparison bars. For example, consider the problem:

Louis ate 14 crackers.
Walt ate 5 fewer crackers than Louis.
How many crackers did Walt eat?

