

THINKING WITH NUMBERS

Lesson Descriptions

Comparing With The Difference Unknown

Addition and subtraction can also be used in comparison situations. When two sets are compared, part of one can be matched to the other. The extras are the difference between the two sets. Similarly, length can be used to compare two numbers. Part (length) of one number can be matched to the other number. Any "extra" length is the difference between the two numbers. By using the number line to represent numbers, the difference between the numbers is simply the number of units (length) between them. For example, suppose \$7 is compared to \$9. It takes \$2 more to be added to the \$7 to have as much as \$9, so the difference is \$2. These problems are also a perfect opportunity for children to recognize relationships among small set, the large set and the difference and how both addition and subtraction can be used to represent comparison situations.

small set + difference = large set

difference + small set = large set

large set - small set = difference

large set - difference = small set

Expected content outcomes include helping children learn:

- to recognize the relationship among small set, large set, and the difference,
- to recognize comparing can be represented by both addition and subtraction,
- to use numbers, the plus or minus sign, and equals signs to represent a comparison situation with both addition and subtraction number sentences, and
- to recognize these comparison situations in everyday life.

