

NAME \_\_\_\_\_

Module 2    Whole Number Operations  
Lesson 2    Large Numbers: Subtraction

# Challenge Problems

2.2

## Set 1

1 Find  $767 - 458$  using the Counting Up Method. Explain why this method works.

2 Find  $200 - 153$  by the Standard Subtraction Method. Explain each step.

Possible Answers:

1. 
$$\begin{array}{r} 767 \\ - 458 \\ \hline \end{array}$$

$$\begin{array}{r} 458 \\ + 2 \quad 460 \\ + 40 \quad 500 \\ + 267 \quad 767 \\ \hline 309 \end{array}$$

The Counting Up Method works because the sum of the numbers that are added to 458 to get 767 is the difference between 767 and 458. The difference is the distance between the number being subtracted to the number from which it was subtracted.

2.

$$\begin{array}{r} 9 \\ 1\cancel{0}10 \\ - 200 \\ \hline -153 \\ \hline 47 \end{array}$$

One cannot take three ones from zero ones, so the number needs to be regrouped. There are no tens. Regroup one hundred into 10 tens. Then, regroup one ten into 10 ones. There are now one hundred, nine tens, and 10 ones. Subtract to get 47.