



# Represent Numbers with Expressions

Let's compose and decompose numbers to make expressions with the same value.

## Warm-up

### True or False: Place Value

Decide if each statement is true or false. Be prepared to explain your reasoning.

- 5 hundreds + 2 tens + 7 ones = 527
- 4 hundreds + 12 tens + 7 ones = 527
- 5 hundreds + 7 ones + 2 tens = 527

## Activity 1

### Make Equations True

Find the number that makes each equation true.

1. 5 hundreds + \_\_\_\_ tens + 6 ones =  
5 hundreds + 5 tens + 16 ones

2. 1 hundred + 1 ten + 17 ones =  
1 hundred + \_\_\_\_ tens + 7 ones

3. 4 hundreds + 15 tens + 3 ones =  
\_\_\_\_ hundreds + 5 tens + 3 ones

4. 4 hundreds + 3 tens + 7 ones =  
3 hundreds + \_\_\_\_ tens + 7 ones

5. 7 hundreds + 8 tens + 4 ones =  
7 hundreds + 7 tens + \_\_\_\_ ones



6.  $6 \text{ hundreds} + 9 \text{ ones} = 5 \text{ hundreds} + \underline{\hspace{1cm}} \text{ tens} + 9 \text{ ones}$

7.  $2 \text{ hundreds} + 9 \text{ tens} + 17 \text{ ones} = \underline{\hspace{1cm}} \text{ hundreds} + 7 \text{ ones}$

8.  $3 \text{ hundreds} + 1 \text{ ten} + 5 \text{ ones} =$   
 $2 \text{ hundreds} + 10 \text{ tens} + \underline{\hspace{1cm}} \text{ ones}$

If You Have Time: Make your own equation with a missing value for your partner.



## Activity 2

### Card Sort: Expressions with 3-Digit Values

Your teacher will give you a set of cards. Group them into sets of expressions that have the same value.

Record the letters of the matching cards. Write a new expression that represents the same value.

1. letters for matching expressions: \_\_\_\_\_

new expression:

\_\_\_\_\_

2. letters for matching expressions: \_\_\_\_\_

new expression:

\_\_\_\_\_

3. letters for matching expressions: \_\_\_\_\_

new expression:

\_\_\_\_\_

4. letters for matching expressions: \_\_\_\_\_

new expression:

\_\_\_\_\_

