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

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 hundreds + 9 ones = 5 hundreds + _____ tens + 9 ones

7. 2 hundreds + 9 tens + 17 ones = _____ hundreds + 7 ones

8. 3 hundreds + 1 ten + 5 ones =

   2 hundreds + 10 tens + _____ ones

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

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:

   _____