Expanded Form of Numbers

Let's represent 3-digit numbers as a sum of the value of each digit.

Warm-up

True or False: Value of Digits

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

- $800 + 90 + 7 = 897$

- $156 = 50 + 100 + 6$

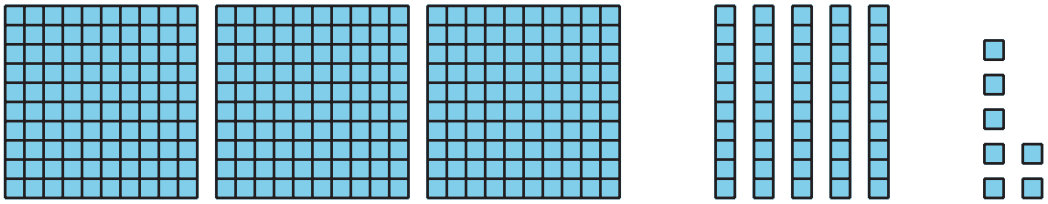
- $407 = 70 + 400$

- $632 = 22 + 10 + 600$

Activity 1

Expressions and 3-Digit Numbers

1. Andre has 3 hundreds. Tyler has 5 tens. Mai has 7 ones. They want to represent the amount with an expression.



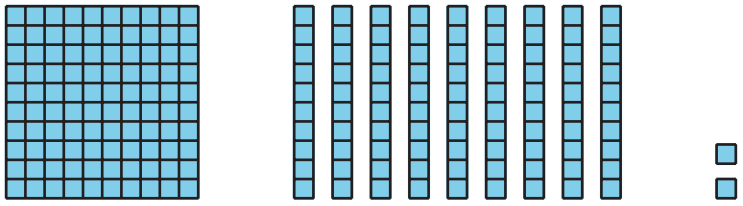
Write an expression to represent the sum of their values.

_____ + _____ + _____

Write the total value as a 3-digit number. _____

Write each number as the sum of hundreds, tens, and ones. This is called expanded form. Then write the 3-digit number.

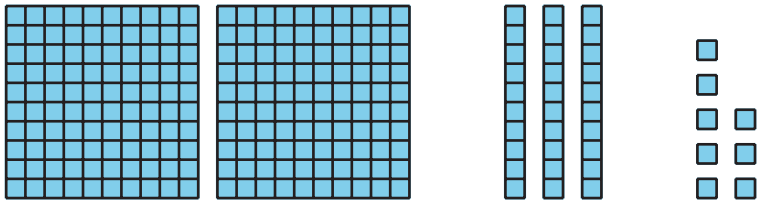
2.



Expanded form: _____

3-digit number: _____

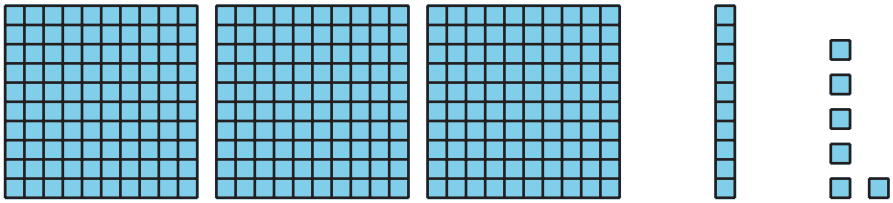
3.



Expanded form: _____

3-digit number: _____

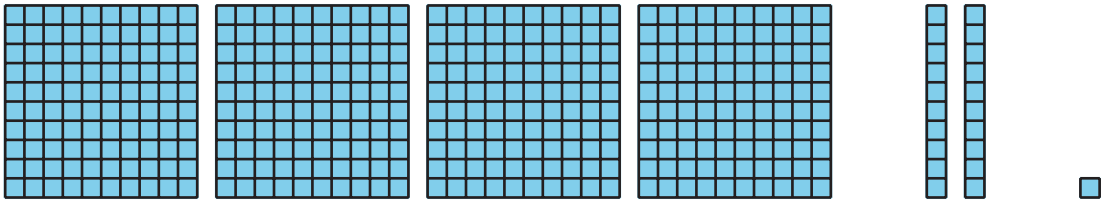
4.



Expanded form: _____

3-digit number: _____

5.



Expanded form: _____

3-digit number: _____

Activity 2

Make It and Expand It

1. Roll the number cubes.

   Make the largest number possible.

   Write it as a 3-digit number. _____

   Write it in expanded form.

2. Roll the number cubes.

   Make the smallest number possible.

   Write it as a 3-digit number. _____

   Write it in expanded form.

3. Roll the number cubes.

   Use the same digits. Make a different number than your partner.

   Write it in expanded form.

   _____

   Write it as a 3-digit number. _____