

Unit 1: Optional Study Guide

Name _____

Date _____

1. Compare the values of each 2 in the number 221,548.

Use words, numbers, or a picture words to explain.

2. Compare using $>$, $<$, or $=$. Write your answer inside the circle.

a. 234 thousands + 7 ten thousands 241,000

b. 4 hundred thousands - 2 thousands 200,000

c. 1 million 4 hundred thousands + 6 hundred thousands

d. 709 thousands - 1 hundred thousand 708 thousands

3. Cleveland OH, has a population of 390,113 people. Detroit MI has 298,588 more people than Cleveland OH. Buffalo, NY has 131,154 less people than Cleveland.

a. What is the total population of all three cities? Draw a tape diagram to model the word problem. Then, solve the problem.

b. Round to the nearest hundred thousand to check the reasonableness of your answer for the population of Buffalo, NY.

c. Record each city's population in numbers, in words, and in expanded form.

d. Compare the population of Detroit and Buffalo using $>$, $<$, or $=$.

e. Joey lives in Fredericksburg, VA, which has a population of 24,286. He says that Buffalo's population is about 10 times as large as Fredericksburg's population. Explain Joey's thinking.

Name _____

Answer Key

Date _____

1. Compare the values of each 2 in the number 221,548.

Use words, numbers, or a picture words to explain.

The number is two hundred twenty one thousand, five hundred forty eight. The twos stand for two hundred thousand and twenty thousand.

2. Compare using $>$, $<$, or $=$. Write your answer inside the circle.

a. 234 thousands + 7 ten thousands $>$ 241,000

b. 4 hundred thousands - 2 thousands $>$ 200,000

c. 1 million $=$ 4 hundred thousands + 6 hundred thousands

d. 709 thousands - 1 hundred thousand $<$ 708 thousands

3. Cleveland OH, has a population of 390,113 people. Detroit MI has 298,588 more people than Cleveland OH. Buffalo, NY has 131,154 less people than Cleveland.

a. What is the total population of all three cities? Draw a tape diagram to model the word problem. Then, solve the problem.

1,345,773

b. Round to the nearest hundred thousand to check the reasonableness of your answer for the population of Buffalo, NY.

$$400,000 - 300,000 = 100,000$$

c. Record each city's population in numbers, in words, and in expanded form.

Detroit 688,701

six hundred eighty eight thousand seven hundred one

$$600,000 + 80,000 + 8,000 + 700 + 1$$

Cleveland 398,113

Three hundred ninety eight thousand, three hundred thirteen

$$300,000 + 90,000 + 8,000 + 100 + 10 + 3$$

Buffalo 258,959

Two hundred fifty eight thousand, nine hundred fifty nine

$$200,000 + 50,000 + 8,000 + 900 + 50 + 9$$

d. Compare the population of Detroit and Buffalo using $>$, $<$, or $=$.

Detroit's population is $>$ Buffalo's

e. Joey lives in Fredericksburg, VA, which has a population of 24,286. He says that Buffalo's population is about 10 times as large as Fredericksburg's population. Explain Joey's thinking.

$24,000 \times 10 = 240,000$ and Buffalo's population is 258,000