

Name \_\_\_\_\_

Date \_\_\_\_\_

### Decimals in Numeric, Word, and Expanded Form - Guided Lesson Explanation

#### Explanation to #1

Step 1) Identify what is being asked of you.

"Write six hundred forty-four and seven tenths in numeric form."

Step 2) Standard form is the reverse of expanded form. We will begin with expanded form and change it to the way we normally write numbers.

Step 3) A number in standard form is just the same way we use always using to seeing it.

six hundred forty-four and seven tenths

6	4	4	.	7
six hundred	forty	four	.	seven tenth

So we will write six hundred forty-four and seven tenths in numeric number as 644.7.

#### Explanation to #2

Step 1) Identify what is being asked of you.

"Write 571.872 in words."

Step 2) Word form of a number is a way to write the number using words.

Step 3 a.) First, read the numbers to the left of the decimal point as a whole number.

b.) Read the numbers to the right of the decimal point as a whole number.

5	7	1	.	8	7	2
hundreds	tens	ones	.	tenths	hundredths	thousandths

So the word form for the number 571.872 is five hundred seventy one, eight hundred and seventy two thousandths.



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### Explanation to #3

Step 1) First we look to see what is being asked of us.

"Write this number in expanded form 867.64."

Step 2) Expanded form is a way to write a number that shows the sum of values of each digit of a number.

Step 3) The value of 8 is  $8 \times 100 = 800$

the value of 6 is  $6 \times 10 = 60$

the value of 7 is  $7 \times 1 = 7$

the value of 6 is  $6 \times \frac{1}{10} = \frac{6}{10} = .6$

the value of 4 is  $4 \times \frac{1}{100} = \frac{4}{100} = .04$

Therefore, the expanded form of the number 867.64 is

$8 \times 100 + 6 \times 10 + 7 \times 1 + 6 \times (1/10) + 4 \times (1/100)$ .

