Practice: Converting Between Decimal Forms

Name: _____   Date: _____

Question 1

Convert to word form and all decimal expanded notations

I.   345.45

Place Value Chart														
thousands			ones			.	decimal place values							
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Word Form:

Reduced Expanded Notations:

II. 74.500005

Place Value Chart														
thousands			ones			.	decimal place values							
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Word Form:

Reduced Expanded Notations:

Practice: Converting Between Decimal Forms

Question 2

Convert to standard notation and word form

I. 90 + 7 + 0.01 + 0.0002 + 0.000005

Place Value Chart														
thousands			ones			.	decimal place values							
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Standard Notation:

Word Form:

II. 3 hundredths + 7 ten-thousandths + 8 hundred-thousandths + 3 ten-millionths

Place Value Chart														
thousands			ones			.	decimal place values							
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Standard Notation:

Word Form:

Practice: Converting Between Decimal Forms

Question 3

Convert to standard notation and decimal number expanded notation

I. ninety-seven thousand, two hundred six and thirty-four thousand seven hundred thirty-two hundred-thousandths

Place Value Chart														
thousands			ones			.	decimal place values							
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Decimal Number Expanded Notation:

Standard Notation:

II. seven hundred seventy-seven and seventy-seven million seven hundred seventy-seven thousand seven hundred seventy-seven hundred-millionths.

Place Value Chart														
thousands			ones			.	decimal place values							
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Decimal Number Expanded Notation:

Standard Notation:

Practice: Converting Between Decimal Forms

Name: **Key**

Date:

Question 1

Convert to word form and all decimal expanded notations

I. 345.45

Place Value Chart																
thousands			ones				decimal place values									
		3	4	5	.	4	5									
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Word Form:

three hundred forty-five and forty-five hundredths

Reduced Expanded Notations:

3 hundreds + 4 tens + 5 ones + 4 tenths + 5 hundredths   Place Value Name Expanded Notation

300 + 40 + 5 + 0.4 + 0.05   Decimal Number Expanded Notation

$300 + 40 + 5 + \dfrac{4}{10} + \dfrac{5}{100}$ Fractional Expanded Notation

II. 74.500005

Place Value Chart																
thousands			ones				decimal place values									
			7	4	.	5	0	0	0	0	5					
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Word Form:

seventy-four and five hundred thousand five millionths

Reduced Expanded Notations:

7 tens + 4 ones + 5 tenths + 5 millionths   Place Value Name Expanded Notation

70 + 4 + 0.5 + 0.000005   Decimal Number Expanded Notation

$70 + 4 + \dfrac{5}{10} + \dfrac{5}{1,000,000}$ Fractional Expanded Notation

Practice: Converting Between Decimal Forms

Question 2

Convert to standard notation and word form

I. 90 + 7 + 0.01 + 0.0002 + 0.000005

Place Value Chart														
thousands			ones				decimal place values							
				9	7	.	0	1	0	2	0	5		
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Standard Notation: 97.010205

Word Form: ninety-seven and ten thousand two hundred five millionths

II. 3 hundredths + 7 ten-thousandths + 8 hundred-thousandths + 3 ten-millionths

Place Value Chart														
thousands			ones				decimal place values							
					0	.	0	3	0	7	8	0	3	
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Standard Notation: 0.0307803

Word Form: three hundred seven thousand eight hundred three ten-millionths

Practice: Converting Between Decimal Forms

Question 3

Convert to standard notation and decimal number expanded notation

I. ninety-seven thousand, two hundred six and thirty-four thousand seven hundred thirty-two hundred-thousandths

Place Value Chart													
thousands			ones				decimal place values						
	9	7	2	0	6	.	3	4	7	3	2		
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Decimal Number Expanded Notation: 90,000 + 7,000 + 200 + 6 + 0.3 + 0.04 + 0.007 + 0.0003 + 0.00002

Standard Notation: 97,206.34732

II. seven hundred seventy-seven and seventy-seven million seven hundred seventy-seven thousand seven hundred seventy-seven hundred-millionths.

Place Value Chart													
thousands			ones				decimal place values						
		7	7	7	.	7	7	7	7	7	7	7	7
hundreds	tens	ones	hundreds	tens	ones	decimal	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths	ten millionths	hundred millionths

Decimal Number Expanded Notation: 700 + 70 + 7 + 0.7 + 0.07 + 0.007 + 0.0007 + 0.00007 + 0.000007 + 0.0000007 + 0.00000007

Standard Notation: 777.77777777