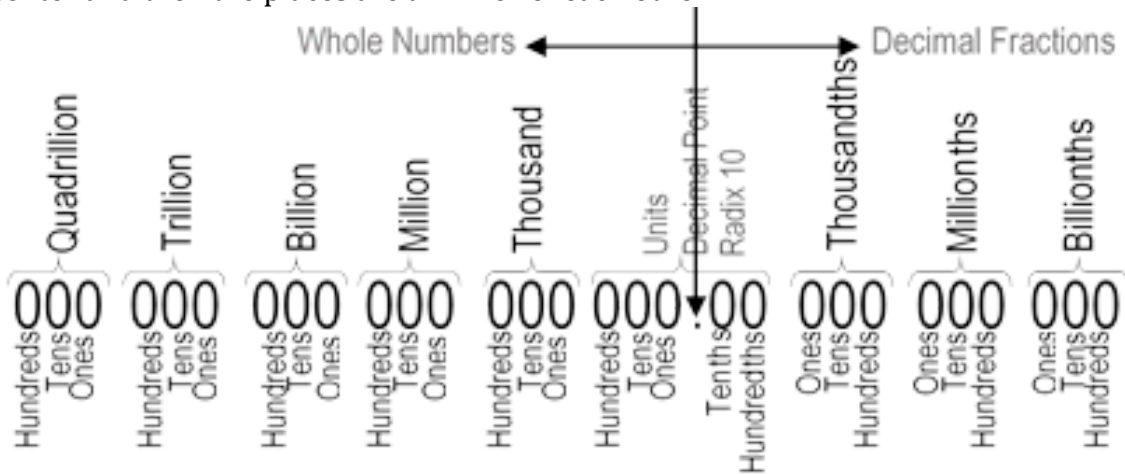


Decimals

“And” = decimal point: just don’t say “and” when there is nothing in front of the decimal point.

Saying and writing decimals correctly:

Start by showing that the decimal point is the center. The ones/unit place is the real center and then the places are a mirror of each other.



Hyphens are very important when writing out and saying decimals. What you need to do is say the number that is behind the decimal point and then place value that the decimal ends in.

For example, .00005 → five hundred-thousandths and .500 → five-hundred thousandths
Both of these examples are made up of the same words but the hyphen tells us the difference in the two numbers. The hyphen should be placed between the numbers that need to be connected.

Practice Writing in words and saying decimal Problems:

- .310
- .0004
- .000000910
- .000000900
- 504.0074
- Two hundred-millionths

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Teaching Notes For Homework #13

Ordering Decimals

Descending means big to small and ascending means small to big.

Sample problem: Put the following in descending order .09, .099, .9, .9999, .1

1. Stack the numbers on top of each other lining up the decimals
.09
.099
.9
.9999
.1
2. Draw a rectangle so the longest number just fits and then “complete” the rectangle by filling the other numbers with zeros
.0900
.0990
.9000
.9999
.1000
3. Pretend that the decimals aren’t there and treat the numbers like whole numbers. Put the “whole” numbers in order. *Be sure your final answer is in decimal form.
900
990
9000
9999
1000

Practice Ordering Decimals Problems:

- .82, .082, .0091, .2, .08082

Rounding Decimals

Use the same rounding technique and rules for rounding decimals but instead of making the rest of the number have zeros just have the decimal end with the number you rounded to.

Practice Rounding Decimal problems:

- Round 58.03862 to the thousandths place
- Round 389.2199951 to the hundred-thousandths place
- Round 8673.97228 to the hundreds place

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Teaching Notes For Homework #13

Adding and Subtracting Decimals

Line up the dots and then add and subtract like normal.

Practice Adding and Subtracting Decimal Problems:

- $23.089 + 589.26 - 37.0098$
- $86.341 - 57.09 - .00876$

Practice Math God Problem:

$$\sqrt[3]{1331} - 4(3x - 4) - 8x - (-1 - 2)^2 = -(-3 - 2)^0 - 36 \div 6(-3 - 3) - 2(4x - 1)3x$$

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