

Decimals

Units			•	1/10	1/100	1/1000
Hundreds	Tens	Ones	•	Tenths	Hundredths	Thousandths
			•			
			•			

Ordering numbers:

4.32, 4.67, 4.71, 4.98, 5.43
Smallest Largest

6.78, 6.71, 6.55, 6.38, 6.31
Largest Smallest



Key Vocabulary



Ascending - Increase in size or quantity

Decimal - A system of numbers based on the number ten, tenth parts and powers of ten

Descending - Decrease in size or quantity

Hundredth - One out of 100 equal parts of a whole

Numeral - A figure, symbol, or group of figures representing a number

Partition - Divide into parts

Place holder - A significant zero in the place value of a number

Place value - The value a digit has because of its position in a number

Tenth - One out of 10 equal parts of a whole

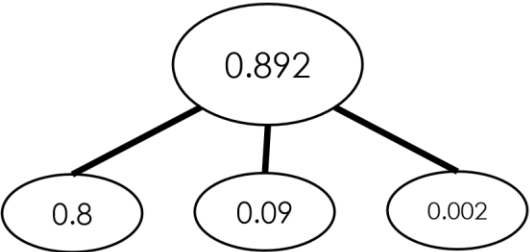
Thousandth - One out of 1000 equal parts of a whole

Partitioning Numbers:

$$16.4 = 10 + 6 + 0.4$$

$$67.83 = 60 + 7 + 0.8 + 0.03$$

$$34.189 = 30 + 4 + 0.1 + 0.08 + 0.009$$



Less than <

Greater than >

$$3.45 < 3.68$$

$$7.21 > 4.784$$

Fractions as decimals:

$\frac{1}{10} = 0.1$	$\frac{1}{1000} = 0.001$	$\frac{1}{2} = 0.5$	$\frac{1}{3} = 0.33$
$\frac{1}{100} = 0.01$	$\frac{1}{4} = 0.25$	$\frac{1}{5} = 0.2$	$\frac{1}{8} = 0.125$

Whole number equivalents:

$\frac{10}{10} = 1$	$\frac{100}{100} = 1$	$\frac{1000}{1000} = 1$
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Multiplying and dividing by 10, 100 and 1000

When multiplying by 10, 100 or 1000, the digits move to the left.

Units			•	1/10	1/100	1/1000
Hundreds	Tens	Ones	•	Tenths	Hundredths	Thousandths
	4	2	•	7		



When dividing by 10, 100 or 1000, the digits move to the right.

Units			•	1/10	1/100	1/1000
Hundreds	Tens	Ones	•	Tenths	Hundredths	Thousandths
	4	2	•	7		



The number of places is determined by the number of place holders.

10 = move one place
100 = move two places
1000 = move three places

Adding and subtracting decimals:

Remember to line up numbers correctly placed on their place value when calculating with decimal numbers. Any gaps can be filled using **place holders**.

e.g.

$$49 + 57.81$$

$$67.84 - 31.5$$

$$\begin{array}{r} 49.00 \\ + 57.81 \\ \hline \end{array}$$

$$\begin{array}{r} 57.81 \\ - 49.30 \\ \hline \end{array}$$