

Title

Operations with Decimals

Videos

English:

<https://youtube/wxcPZT3Poc0> (Adding and Subtracting)

<https://youtube/ha8udGpjkMI> (Multiplying)

<https://youtube/UCBXoLb2ItI> (+/-/multiply & divide)

Spanish:

<https://youtube/7AnEBvWJVdK> (Add & Subtract)

<https://youtube/TpCZNBpb4HO> (Divide)

<https://youtube/-miSFwulG8> (Multiply)

Anchor Chart

Adding & Subtracting Decimals...

Rule 1: line 'em up!

Place Value Matters!

$$\begin{array}{r} 1.4 \\ + 6.75 \\ \hline \end{array}$$
$$\begin{array}{r} 15.1 \\ - 7.95 \\ \hline \end{array}$$

Rule 2: drop it down!

No decimal changes the value!

$$\begin{array}{r} 1.4 \\ + 6.75 \\ \hline \end{array}$$
$$\begin{array}{r} 15.1 \\ - 7.95 \\ \hline \end{array}$$

Rule 3: fill 'em in!

Think - Does it make sense?

$$\begin{array}{r} 1.40 \\ + 6.75 \\ \hline \end{array}$$
$$\begin{array}{r} 15.10 \\ - 7.95 \\ \hline \end{array}$$

Dividing \div \div Decimals

Step 1: Move the decimal to the right (as many times as necessary) to make the divisor a whole number.

$$48.40 \div .02$$

\swarrow
 $.02 = 2$

Step 2: Move the decimal in the dividend the same number of times you moved it in the divisor.

$$.02 = 2$$

$$48.40 = 4,840$$

Step 3: Place the decimal into the quotient directly above the moved decimal point in the dividend.

$$2 \overline{)4840.}$$

Step 4: Divide.

Answer: 2420

Multiplying with Decimals

* Count the number of decimal places in the factors; the product will have the same number of decimal places.

Ex: 1

$$\begin{array}{r} 2.13 \text{ (2 decimal places)} \\ \times 2.4 \text{ (1 decimal place)} \\ \hline 852 \\ 4260 \\ \hline 5.112 \text{ (3 decimal places)} \end{array}$$

2	.	1	.	03
4	.	2	.	06
.4	.	8	.	04
			.	012

Do not line up the decimals.

Line up the decimals when adding!

$$\begin{array}{r} 4.000 \\ + 0.800 \\ + 0.200 \\ + 0.040 \\ + 0.060 \\ + 0.012 \\ \hline 5.112 \end{array}$$