

Decimals

Rules for ADDING & SUBTRACTING Decimals:

$$\begin{array}{r} 7.10 \\ + 31.29 \\ \hline 38.39 \end{array}$$

Arrows indicate the alignment of decimal points: one arrow points to the decimal point in 7.10, and another points to the decimal point in 38.39.

Example 5:

$$12 \div 1.6$$

Example 6:

$$12.95 \div 1.25$$

÷ Dividing ÷

Rules for MULTIPLYING Decimals:

$$\begin{array}{r} 3.24 \leftarrow \\ \times 8.5 \leftarrow \\ \hline 1620 \\ + 25920 \\ \hline 27.540 \leftarrow \end{array}$$

Example 3:
 1.25×23

Example 4:
 4.31×9.5

× Multiplying ×

Rules for DIVIDING Decimals:

$$4.\underset{\curvearrowright}{3}\underset{\curvearrowright}{2} \div 3.\underset{\curvearrowright}{6} = 43.2 \div 36$$

$$\begin{array}{r} 1.2 \\ \hline 36 \overline{) 43.2} \\ \underline{-36} \downarrow \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

Example 1:

$$7 + 5.314$$

Example 2:

$$15.6 - 6.39$$

+ Adding & Subtracting -

Decimals

Rules for ADDING & SUBTRACTING Decimals:

$$\begin{array}{r} 7.10 \\ + 31.29 \\ \hline 38.39 \end{array}$$

Use '0' as a place holder so that both numbers have the same number of digits to the right of the decimal.

Add each column.

*Line up the decimal points!!!

Example 5:

$$12 \div 1.6 = 120 \div 16$$

$$\begin{array}{r} 7.5 \\ 16 \overline{) 120.0} \\ \underline{-112} \downarrow \\ 80 \\ \underline{-80} \\ 0 \end{array}$$

Example 6:

$$12.95 \div 1.25 = 1295 \div 125$$

$$\begin{array}{r} 10.36 \\ 125 \overline{) 1295.00} \\ \underline{-125} \downarrow \downarrow \downarrow \\ 45 \downarrow \downarrow \downarrow \\ \underline{-0} \downarrow \downarrow \downarrow \\ 450 \downarrow \downarrow \downarrow \\ \underline{-375} \downarrow \downarrow \downarrow \\ 750 \downarrow \downarrow \downarrow \\ \underline{-750} \\ 0 \end{array}$$

÷ Dividing ÷

Rules for MULTIPLYING Decimals:

Line up the
last digit of
each number
(right justify)

$$\begin{array}{r} 3.24 \\ \times 8.5 \\ \hline \end{array}$$

2 decimals
+ 1 decimal

$$\begin{array}{r} 1620 \\ + 25920 \\ \hline 27.540 \end{array}$$

3 decimals

Example 3:

$$1.25 \times 23$$

$$\begin{array}{r} 1.25 \\ \times 23 \\ \hline 375 \\ + 2500 \\ \hline 28.75 \end{array}$$

2 decimals

2 decimal
places

Example 4:

$$4.31 \times 9.5$$

$$\begin{array}{r} 4.31 \\ \times 9.5 \\ \hline 2155 \\ + 38790 \\ \hline 40.945 \end{array}$$

3 decimals

3 decimal
places

× Multiplying ×

Rules for DIVIDING Decimals:

$$4.\underline{3}2 \div 3.\underline{6} = 43.2 \div 36$$

Don't forget-
The divisor
must always
be an integer!

$$\begin{array}{r} 1.2 \\ \hline 36 \overline{) 43.2} \\ \underline{-36} \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

Make the divisor an integer by multiplying both numbers by a power of 10. (10, 100, 1000, etc.)

Example 1:

$$7 + 5.314$$

$$\begin{array}{r} 7.000 \\ + 5.314 \\ \hline 12.314 \end{array}$$

Example 2:

$$15.6 - 6.39$$

$$\begin{array}{r} 15.60 \\ - 6.39 \\ \hline 9.21 \end{array}$$

+ Adding & Subtracting -

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Directions for putting together the DECIMAL foldable!

Step 1: Print pages 1 & 2
front to back as shown:

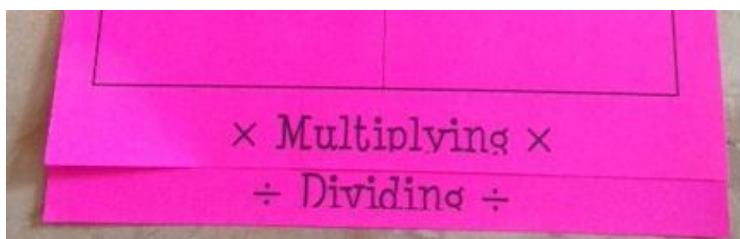


Print pages 3 & 4
front to back as shown:



Step 2: Place the page that says "Dividing" (at the very bottom) face up on your desk.

Step 3: Place the page that says "Multiplying" (at the very bottom) face up on top of the other page, so that you can just see the bottom of the original page, as shown:



Step 4: Fold over both pages so that "Adding & Subtracting" is just above where it says "Multiplying" and the "Decimals" title is at the very top.

Step 4: Staple and you're done!

