

Decimals

Rules for ADDING & SUBTRACTING Decimals:

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

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:

$$4.\underline{32} \div 3.\underline{6} = 43.2 \div 36$$

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

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:

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

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

Example 6:

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

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

÷ Dividing ÷

Rules for MULTIPLYING Decimals:

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

$$\begin{array}{r} 3.24 \leftarrow 2 \text{ decimals} \\ \times 8.5 \leftarrow + 1 \text{ decimal} \\ \hline 1620 \\ + 25920 \\ \hline 27.540 \leftarrow 3 \text{ decimals} \end{array}$$

↑↑↑

Example 3:

$$1.25 \times 23$$

$$\begin{array}{r} 1.25 \quad 2 \text{ decimals} \\ \times 23 \\ \hline 375 \\ + 2500 \\ \hline 28.75 \end{array}$$

2 decimal places

Example 4:

$$4.31 \times 9.5$$

$$\begin{array}{r} 4.31 \quad 3 \text{ decimals} \\ \times 9.5 \\ \hline 2155 \\ + 38790 \\ \hline 40.945 \end{array}$$

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 -

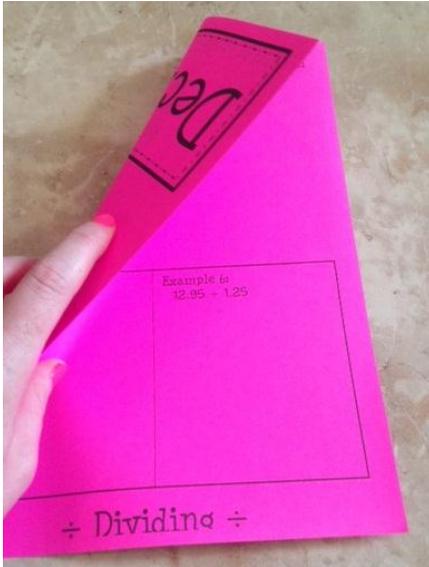
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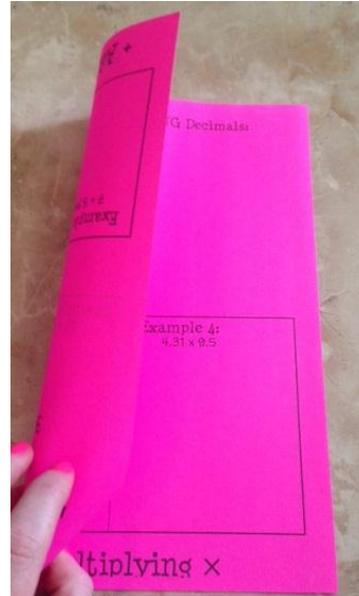
Directions for putting together the DECIMAL foldable!

Step 1:

Print pages 1 & 2
front to back as shown:

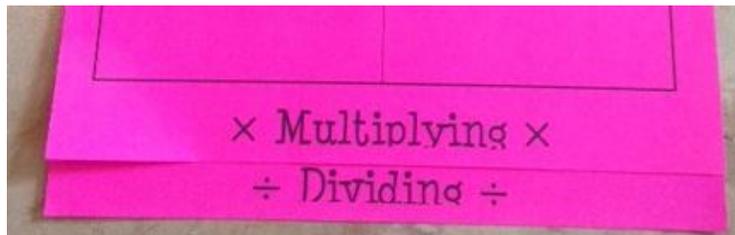


Print pages 3 & 4
front to back as shown:



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!

