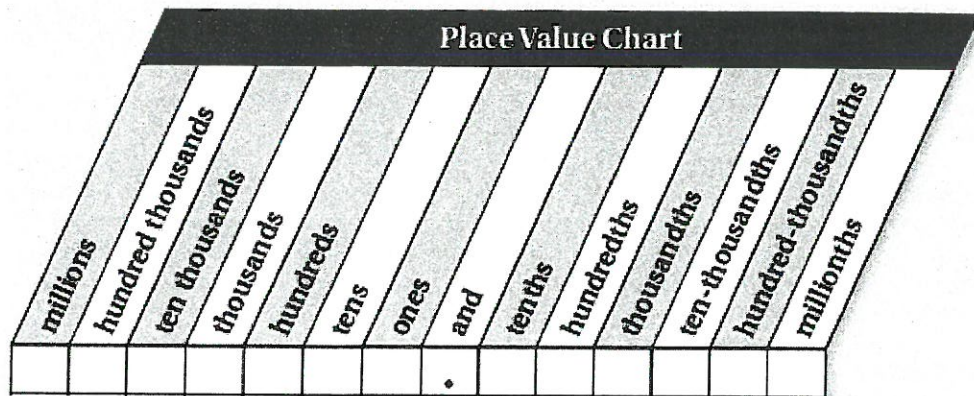


Section 2.4: Adding and Subtracting Decimals Teacher Notes

Objective: Students will add and subtract decimals.



** have the students properly put six thousand five hundred thirty two and four hundred ninety one thousandths into the chart above.

When adding and subtracting decimals, line up the decimals first

Examples:

<p>1.) $8.13 + 2.76$</p> $\begin{array}{r} 8.13 \\ + 2.76 \\ \hline 10.89 \end{array}$	<p>2.) $1.45 + 23.7$</p> $\begin{array}{r} 1.45 \\ + 23.70 \\ \hline 25.15 \end{array}$
<p>3.) $5.08 - 3.74$</p> $\begin{array}{r} 5.08 \\ - 3.74 \\ \hline 1.34 \end{array}$	<p>4.) $15.9 - 3.17$</p> $\begin{array}{r} 15.90 \\ - 3.17 \\ \hline 12.73 \end{array}$

5a.) Your meal at the school cafeteria cost \$3.40. Your friend's meal cost \$3.90. How much was your total meal?

$$\begin{array}{r} 3.40 \\ + 3.90 \\ \hline \$7.30 \end{array}$$

5b.) You pay for both meals with \$8. How much change do you receive?

$$\begin{array}{r} 8.00 \\ - 7.30 \\ \hline \$0.70 \end{array}$$

Section 2.5: Multiplying Decimals Teacher Notes

Objective: Students will multiply decimals.

Multiplying decimals by whole numbers:

- Multiply the numbers
- Place the decimals

$$\begin{array}{r} 13.91 \\ \times 7 \\ \hline 97.37 \end{array}$$

2 decimal places

$$\begin{array}{r} 6.218 \\ \times 4 \\ \hline 24.872 \end{array}$$

3 decimal places

Multiplying decimals by decimals:

- Multiply the numbers
- Place the decimals

$$\begin{array}{r} 4.716 \\ \times 0.2 \\ \hline 0.9432 \end{array}$$

3 decimal places
+ 1 decimal place
4 decimal places

Examples:

<p>1.) 13.91×7</p> $\begin{array}{r} 13.91 \leftarrow 2 \text{ places} \\ \times 7 \\ \hline 97.37 \end{array}$	<p>2.) 3.45×0.6</p> $\begin{array}{r} 3.45 \leftarrow 2 \text{ places} \\ \times 0.6 \leftarrow 1 \text{ place} \\ \hline 2.07 \leftarrow 3 \text{ places} \end{array}$
<p>3.) 4.8×7.2</p> $\begin{array}{r} 4.8 \leftarrow 1 \text{ place} \\ \times 7.2 \leftarrow 1 \text{ place} \\ \hline 96 \quad 2 \text{ places total} \\ \underline{3360} \\ 34.56 \end{array}$	<p>4.) 0.7×0.5</p> $\begin{array}{r} 0.5 \leftarrow 1 \text{ place} \\ \times 0.7 \leftarrow 1 \text{ place} \\ \hline 0.35 \leftarrow 2 \text{ places total} \end{array}$

5.) You buy 4 cans of soda for \$1.28 per soda. How much did you spend on soda?

$$\begin{array}{r} 1.28 \\ \times 4 \\ \hline \$5.12 \end{array}$$

Section 2.6: Dividing Decimals Teacher Notes

Objective: Students will divide decimals.

Dividing Decimals by Whole Numbers:

- Place the decimal point in the same place directly above the original problem.
- Divide the numbers

$$\begin{array}{r} 1.83 \\ 4 \overline{)7.32} \end{array}$$

Place the decimal point in the quotient above the decimal point in the dividend.

Dividing Decimals by Decimals:

- Move the decimal away from the outside number (divisor) and move the decimal the same number of spaces on the inside number (dividend)
- Place the decimal point in the same place directly above the original problem.
- Divide the numbers

$$\begin{array}{r} 1.2 \overline{)4.56} \end{array}$$

Multiply each number by 10.

$$12 \overline{)45.6}$$

Place the decimal point above the decimal point in the dividend 45.6.

Examples:

1.) $7.6 \div 4$

$$\begin{array}{r} 1.9 \\ 4 \overline{)7.6} \\ -4 \\ \hline 36 \\ -36 \\ \hline 0 \end{array}$$

Place the decimal point in the quotient above the decimal point in the dividend.

∴ So, $7.6 \div 4 = 1.9$.

Reasonable? $1.9 \approx 2$ ✓

2.) $4.38 \div 12$

$$\begin{array}{r} 0.365 \\ 12 \overline{)4.380} \\ -36 \\ \hline 78 \\ -72 \\ \hline 60 \\ -60 \\ \hline 0 \end{array}$$

Place the decimal point in the quotient above the decimal point in the dividend.

Insert a zero and continue to divide.

∴ So, $4.38 \div 12 = 0.365$.

Check $0.365 \times 12 = 4.38$ ✓

3.) $18.2 \div 1.4$

$$\begin{array}{r} 1.4 \overline{)18.2} \longrightarrow 14 \overline{)182.} \\ -14 \\ \hline 42 \\ -42 \\ \hline 0 \end{array}$$

Place the decimal point above the decimal point in the dividend 182.

Multiply each number by 10.

∴ So, $18.2 \div 1.4 = 13$.

Check $13 \times 1.4 = 18.2$ ✓

4.) $2.6 \div 0.5$

$$\begin{array}{r} 5.2 \\ 5 \overline{)26} \\ -25 \\ \hline 10 \text{ (Brought down a zero)} \\ -10 \\ \hline 0 \end{array}$$

5.) Three friends split a bag of chips. The total cost is \$4.80. How much does each person pay?

$$\begin{array}{r} 1.6 \\ 3 \overline{) 4.8} \\ \underline{-3} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

\$1.60 per person