## LIFFEPAC Math



## MATHEMATICS 409

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## I. PART ONE

## Learn Box

I can learn about decimals.
I can review multiplication of whole numbers.
I can locate numbers on a grid pattern.
Let's review the place value chart for whole numbers to hundred thousands.

| thousands |  |  | units |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | tens | ones |  | hundreds | tens |
| 6 | 3 | 1 |  | 8 | 4 |
| hunes |  |  |  |  |  |
|  |  |  |  | 5 |  |

631,845 is read, "six hundred thirty-one thousand, eight hundred forty-five." We use the hyphen to join the tens' numbers and ones' numbers. We write a comma between the thousands' place and hundreds' place.
1.1 a. What are the two main parts
of the place value chart?
b. What are the three places in each main part? $\qquad$ , $\qquad$
$\qquad$
c. What do we write between the two main parts?
d. What do we always write between the number words for tens and ones?

Decimals are special fractions.
Decimals have denominators that are multiples of 10.
Look at the place value chart for whole numbers and decimals.
The whole numbers are on the left. The decimals are on the right.
A decimal point separates the whole numbers from the decimals.

| units |  |  |  | decimals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| hundreds | tens | ones | . | tenths | hundredths thousandths |  |
| 100's | 10 's | 1 1's |  | 10ths | 100ths | 1,000ths |

1.2 Answer the questions. Use the whole number and decimal chart.

What is the first place to the right of the decimal point? $\qquad$
the second place? $\qquad$ the third place? $\qquad$

|  | units |  | decimals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| hundreds | tens | ones | . | tenths | hundredths thousandths |  |
| 100 's | 10 's | 1 's |  | 10ths | 100ths | 1,000ths |

1.3 Follow the instructions. Use the whole number and decimal chart.
a. Write a 4 above the word tenths. We say four-tenths.

We write the fraction $\frac{4}{10}$ or the decimal .4.
b. Write an 8 above the word hundredths. We say forty-eight hundredths. We write the fraction $\frac{48}{100}$ or the decimal . 48 .
c. Write a 2 above thousandths. We say four hundred eighty-two thousandths. We write the fraction $\frac{482}{1,000}$ or the decimal 482 .
1.4 Write the missing numbers or words on the lines.
a. . 3
b. . 6
c. $\qquad$ 5 10
d. $\qquad$
$\qquad$
e. . 35
f. . 75
g. $\qquad$
84
$\frac{100}{}$
h. $\qquad$
$\qquad$
i .409 $\qquad$
j. . 234

161
k. $\qquad$ 1,000
I. $\qquad$
eight tenths
sixty-three hundredths
three tenths
$\qquad$
$\qquad$
thirty-five hundredths
$\qquad$
$\qquad$
four hundred nine thousandths
$\qquad$
$\qquad$
nine hundred forty-two thousandths

In learning about decimals, it is important to remember ...

1. decimals are special fractions and so we read them like fractions.
2. decimals have denominators in the sequence of $10,100,1,000 \ldots$
3. the first place to the right of the decimal point is 10ths.
4. to use calculators, it is necessary to understand decimals.

You have been using decimals whenever you add or subtract in money problems.
1.5 Complete these problems in addition and subtraction of money. Be sure to put the dollar sign and decimal point in the answer.

| $\$ 53.80$ | $\$ 32.08$ | $\$ 68.23$ | $\$ 68.28$ |
| ---: | ---: | ---: | ---: |
| $+\$ 26.41$ |  |  |  |
|  | $+\$ 52.75$ | $\$ 48.56$ |  |

b. $\$ 2.51$
\$2.31
\$3.48
$\$ 7.56$
\$2.82
\$2.16

| $+\quad \$ 4.22$ |
| :--- |

\$3.38
\$2.35
\$3.42
\$3.10
$\$ 3.50$
\$5.13

| $+\quad \$ 2.10$ |
| :--- |

$+\quad \$ 2.81$

+ \$9.21

> | c. $\$ 96.76$ | $\$ 85.49$ | $\$ 73.42$ | $\$ 87.85$ |
| ---: | ---: | ---: | ---: |
| $-\$ 32.75$ | $-\$ 21.61$ | $-\$ 23.21$ | $-\$ 32.52$ |

d. $\begin{array}{r}\$ 47.80 \\ -\$ 13.63 \\ \hline\end{array}$

| $\$ 52.53$ |
| ---: |
| $-\$ 11.47$ |

$\$ 83.52$
\$64.80

- \$52.88
- \$28.41

Follow the steps to multiply to thousands' place by two digits.

$$
\begin{array}{r}
6,046 \\
\times \quad 74 \\
\hline 24,184 \\
423,220 \\
\hline 447,404
\end{array}
$$

1.6 Find the product.

1. Multiply 6,046 by 4 ones.
2. Put a 0 place holder in the ones' place below the 4.
3. Multiply 6,046 by 7 tens.
4. Total the products.


721
b.
672
486
759
437
$\begin{array}{r}\times 25 \\ \hline\end{array}$
$\begin{array}{r}\times 38 \\ \hline\end{array}$
$\begin{array}{r}75 \\ \times 7 \\ \hline\end{array}$
x 69
c. $\begin{array}{r}1,385 \\ \times \quad 52 \\ \hline\end{array}$
$\begin{array}{r}2,563 \\ \times \quad 44 \\ \hline\end{array}$
8,624
7,283
x
x 93
$\times 16$
