

Study Guide for Unit 4 Lesson 2 and 3

Lesson 2

This lesson is a power drill of your skills in operating with whole numbers and decimals.

To add or subtract, line up the like place values, including the decimal.



Line up the decimal points...

$$\begin{array}{r} 8.97 \\ - 2.82 \\ \hline 6.15 \end{array}$$

and just drag that decimal point straight down!

Subtract as usual!

Line up the decimal points...

$$\begin{array}{r}
 5.649 + 39.27 \\
 \hline
 44.919
 \end{array}$$

Carry (regroup) if you need to!

To Multiply:

Multiply the numbers. Don't worry about the decimal points just yet.

$$\begin{array}{r}
 1.124 \\
 \times 1.5 \\
 \hline
 5620 \\
 1124 \\
 \hline
 16860
 \end{array}$$

Count the total number of decimal places (or hops). In this case there are 3 on the top and one on the bottom.

$$\begin{array}{r}
 1.124 \\
 \times 1.5 \\
 \hline
 5620 \\
 1124 \\
 \hline
 16860
 \end{array}$$

Place the decimal point in the answer. Use the same number of hops (decimal places) that you counted.

$$\begin{array}{r}
 1.124 \\
 \times 1.5 \\
 \hline
 5620 \\
 1124 \\
 \hline
 1.6860
 \end{array}$$

Another example:

$$\begin{array}{r}
 0.67 \\
 \times 0.4 \\
 \hline
 0.268
 \end{array}$$


2 decimal places

1 decimal place

3 decimal places

To divide:

Step 1




$$53.5 \overline{) 45.475}$$

➔

Move the decimal point in the divisor to make it a whole number.

Step 2




$$535 \overline{) 45.475}$$

➔

$$535 \overline{) 454.75}$$

Move the decimal point in the dividend the same number of places.

Step 3



$$535 \overline{) 454.75}$$

Move the decimal point straight up to the quotient.

Divide:



$$\begin{array}{r} .85 \\ 535 \overline{) 454.75} \\ \underline{4280} \\ 2675 \\ \underline{2675} \\ 0 \end{array}$$

Practice:

You have a savings account with a balance of \$423.98. You deposit \$61.75. Then you withdraw \$129.64. About how much is left in your account? What is the actual amount left in your account?

Estimate: _____

Actual balance: _____

Lucas bought three CDs for \$11.29, \$15.75, and \$8.95, including sales tax. He gave the clerk \$50.00. How much should Lucas receive in change?

Change: _____

It rained 0.77 inches on Monday. On Tuesday, it rained 0.23 inches more than on Monday. How much did it rain on both days combined?

Total rain: _____

Tyler bought movie tickets for himself and two friends. Each ticket costs \$8.50. You pay with two \$20 bills. How much did you spend? How much change did you receive?

Spent: _____

Change: _____

Five hungry friends share seven pizzas that cost \$8.25 each. How much does each friend pay?

Each friend pays: _____

The regular price on a box of ice-cream sandwiches is \$6.00. They are on sale for half off. If Mr. Campbell buys 10 boxes, what is the total cost of the ice cream sandwiches before tax?

Total cost: _____

Sam bought 5 rolls of ribbon to wrap presents. Each roll contains 10.5 meters of ribbon. If each present uses 1.4 meters of ribbon, how many presents can they wrap?

Amount of presents: _____

Lesson 3

Addition

How many in all
 Altogether
 Sum
 Join
 Total
 Both
 Add

Subtraction

Minus Away
 Difference Remain
 Less Than
 How many more
 How many are left
 "er" words such as longer,
 farther, fewer, faster

Multiplication

Times
 Each
 Area
 Total
 Product
 How many in all
 Multiples of
 Altogether

Division

How many in each
 Shared equally
 Part
 Per
 Divided
 Quotient
 Groups of
 Factors

STEPS for Solving Word Problems

- 

Read the problem carefully.

Maggie picks 2 flowers. Her mom gives her 2 more. How many flowers does Maggie have now?
- 

Underline the facts you will need to solve the problem.

Maggie picks 2 flowers. Her mom gives her 2 more. How many flowers does Maggie have now?
- 

Draw a picture, if needed, to help you solve the problem.

Maggie picks 2 flowers. Her mom gives her 2 more. How many flowers does Maggie have now?
- 

Write a number sentence for the problem.

$2 + 2 = \underline{\quad}$
- 

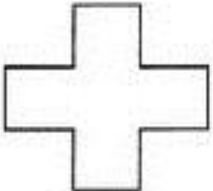
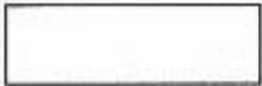
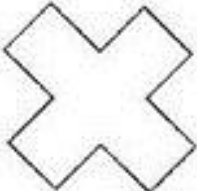
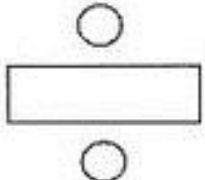
Solve the problem. Show your work.

$2 + 2 = \underline{4}$
- 

Check your answer.

2 flowers
 $+ 2$ flowers
 4 flowers

KEYS TO MATH SIGNS

Sign	Look For
ADDITION 	<ul style="list-style-type: none">+ What is the total?+ How many altogether?+ How many in all?+ What is the perimeter?+ The sum is...+ What is the sum?
SUBTRACTION 	<ul style="list-style-type: none">- How many fewer?- How much change?- How many are left?- The difference is...- What is the difference?
MULTIPLICATION 	<ul style="list-style-type: none">x How many altogether?x Find multiples of...x What is the area?x The product is...x What is the product?
DIVISION 	<ul style="list-style-type: none">÷ The quotient is...÷ What is the quotient?÷ Divide into _____ parts.÷ How many per...÷ What are the factors?

Additional Resources:

<http://studyjams.scholastic.com/studyjams/jams/math/index.htm>

http://www.mathplayground.com/howto_dividedecimals.html

http://www.mathplayground.com/howto_multiplydecimals.html

<https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/adding-decimals-pre-alg/v/subtracting-decimals?playlist=Developmental+Math>