

Concept: Multiplication and Division of Decimals

Name:


- You should have completed Fractions - Section 15 Part A: Multiplication and Division of Decimals before beginning this handout.

PART B: COMPUTER COMPONENT

Instructions: In  follow the **Content Menu** path:

Fractions > Multiplication and Division of Decimals

NOTE: Use the **Menu** button in order to get to the lesson where you left off.

 Work through all Sub Lessons of the following Lessons **in order**:

- Preliminaries to Division
- Partial Quotients
- Fair Sharing Long Division
- Decimals Around Us-Word Problems

NOTE: You will not be finishing the entire section before stopping to complete some **OFF COMPUTER EXERCISES**.



As you work through the computer exercises, you will be prompted to make notes in your notebook/math journal.

When you reach the end of the lesson *Decimals Around Us* on the computer, move on to the **OFF COMPUTER EXERCISES** below.

NOTES

1. Partial Quotients

We want to find $4.73 \div 3$ (Example 1)

or

How many groups of 3 are in 4.73?

How many other ways can you write this question?

$$\frac{4.73}{3}, 3 \overline{)4.73} = 1.58$$

Use the computer prompts to assist you in completing this question.

$$3 \overline{)4.73}$$

Your Notes:

(a) What types should you try to work with when you are dividing using ‘Partial Quotients’?

(b) How do you know when you are finished this type of question?

2. Fair Sharing

We want to share 95.7 equally among 4 people. (Example 2)

We write: $4 \overline{)95.7} = 23.93$

Record the steps required to divided 95.7 equally by 4. (Use steps similar to the computer program for this concept)

Step 1

$$4 \overline{)95.7}$$

Reflection

Which strategy do you feel is the best suited to your learning style? Why?

(Responses will vary)

OFF COMPUTER EXERCISES

For this first set of questions, try to alternate between strategies.

1. Divide the following.

(a) $6.4 \div 2 = \mathbf{3.2}$

(b) $18.6 \div 3 = \mathbf{6.2}$

(c) $\$4.45 \div 5 = \mathbf{\$0.89}$

(d) $\$12.75 \div 3 = \mathbf{\$4.25}$

2. Complete the following problems. *You may use your preferred method for these.*

(a) Johnny paid \$5.12 for a box of 8 chocolates. *How much did he pay for each chocolate?* (Round to the nearest cent)

Johnny paid \$0.64 for each chocolate.

(b) Coach Rivers paid \$341.40 to outfit a team of 12 basketball players. *How much did it cost to outfit each player?*

It cost \$28.45 to outfit each player.

(c) I divided 12.12 by 4 and wrote down the answer of 3.3. *What did I do wrong and what other similar questions might I get wrong?*

You may have gone wrong in a couple of ways...

You may have divided 12.12 by 4 and got the answer 3.03, but accidentally wrote down 3.3.

Also, you may have simply divided each of the 12's in 12.12 by 4 to get 3.3. As you know, this simply cannot be done.

3. *After completing some questions, which strategy/method would you prefer to use? Why?*

(Responses will vary)