

6th Grade Common Core Unit #4: Decimals

Resources: Big Ideas Chapter 2

Common Core Standards: 6.NS.3

Main Focus: Fluently add, subtract, multiply, and divide decimals using the standard algorithm.

Number	Learning Targets	Common Core Standard	Resources
1	I can add and subtract decimals	6.NS.3	2.4
2	I can multiply decimals using the traditional algorithm.	6.NS.3	2.5
3	I can divide decimals using the traditional algorithm.	6.NS.3	2.6

My Practice:

Number	Pre-test:	Exit slip scores	Day #2 Homework	Extra Targeted Practice	Post-test:
1	_____/6				_____/12
2	_____/4				_____/8
3	_____/4				_____/6

1.) After the post-test, I still need to focus on learning targets: _____

2.) My plan to master these learning targets will be: Circle all that apply

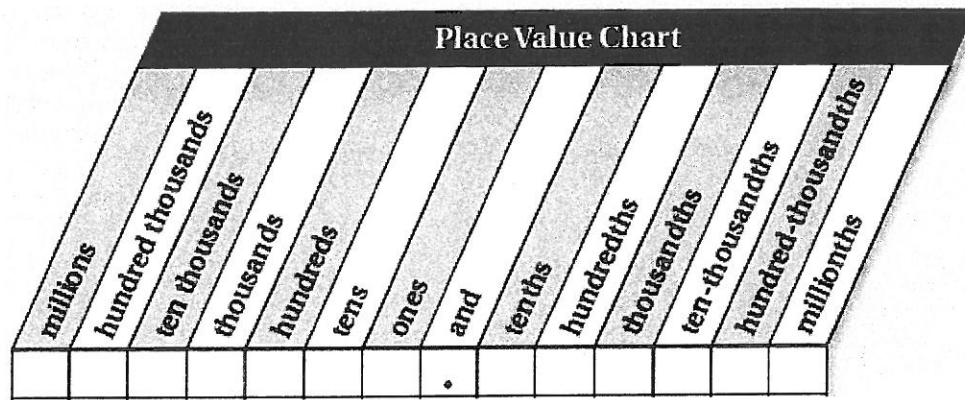
Reread my notes Watch tutorials Practice on Khan Do extra menu items

Other: _____

3.) How will I know that I mastered these learning targets?

Section 2.4: Adding and Subtracting Decimals Notes

Objective: Students will add and subtract decimals.



Write 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:

1.) $8.13 + 2.76$	2.) $1.45 + 23.7$
3.) $5.08 - 3.74$	4.) $15.9 - 3.17$

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

5b.) You pay for both meals with a \$10 bill. How much change do you receive?

2.4**Adding and Subtracting Decimals Day 1 HW****Add.**

1. $6.58 + 2.436$	2. $1.8 + 4.307$	3. $11.415 + 15.32$
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Subtract.

7. $5.64 - 2.31$	8. $9.385 - 5.216$	9. $9.75 - 6.523$
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13. It costs \$5.52 to park in parking lot A and \$3.75 to park in parking lot B. How much more does it cost to park in parking lot A?

2.4

Adding and Subtracting Decimals Day 2 HW

Add.

1. $9.241 + 3.64$	2. $6.72 + 9.8$	3. $14.068 + 12.337$
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Subtract.

7. $8.79 - 2.53$	8. $7.328 - 6.54$	9. $12.026 - 7.51$
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13. The large bottle of nasal spray is 9.46 centimeters tall. The small bottle is 5.29 centimeters tall. **How much shorter** is the small bottle than the large bottle?

14. At the snack shop you buy a bag of popcorn for \$1.30 and a Gatorade for \$1.75. How much do you **spend in all**?

Section 2.5: Multiplying Decimals Students Notes

Objective: Students will multiply decimals.

Multiplying decimals by whole numbers:

- Multiply the numbers
- Place the decimals

$$\begin{array}{r} 13.91 \\ \times 7 \\ \hline 97.37 \end{array} \begin{array}{l} \leftarrow \\ \leftarrow \\ \leftarrow \end{array} \begin{array}{l} 2 \text{ decimal places} \end{array}$$

$$\begin{array}{r} 6.218 \\ \times 4 \\ \hline 24.872 \end{array} \begin{array}{l} \leftarrow \\ \leftarrow \\ \leftarrow \end{array} \begin{array}{l} 3 \text{ decimal places} \end{array}$$

Multiplying decimals by decimals:

- Multiply the numbers
- Place the decimals

$$\begin{array}{r} 4.716 \\ \times 0.2 \\ \hline 0.9432 \end{array} \begin{array}{l} \leftarrow 3 \text{ decimal places} \\ \leftarrow + 1 \text{ decimal place} \\ \leftarrow 4 \text{ decimal places} \end{array}$$

Examples:

1.) 13.91×7	2.) 3.45×0.6
3.) 4.8×7.2	4.) 0.7×0.5

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

2.5

Multiplying Decimals Day 1 HW

Place the decimal point in the product for #1, 2, and 3

$$\begin{array}{r} 1. \quad 2.6 \\ \times 7.9 \\ \hline 2054 \end{array}$$

$$\begin{array}{r} 2. \quad 8.83 \\ \times 0.42 \\ \hline 37086 \end{array}$$

$$\begin{array}{r} 3. \quad 9.44 \\ \times 1.95 \\ \hline 184080 \end{array}$$

Multiply.

4. 3.2×6	5. 5.1×8	6. 0.34×14
7. 8.4×3	8. 6.2×7	9. 1.3×3

13. Describe and correct the error in the solution.

$$\begin{array}{r} \times \quad 0.0004 \\ \times \quad 8 \\ \hline 0.032 \end{array}$$

2.5**Multiplying Decimals HW Day 2**

1.) 0.48×1.5	2.) 7.4×5	3.) 9.5×16
4.) 2.84×21	5.) 0.042×4	6.) 0.035×7
7.) 10×0.065	14.) A bamboo plant grows 1.25 inches in a day. How much does it grow in 7 days?	

Section 2.6: Dividing Decimals Student 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.

$$\begin{array}{r} 3.8 \\ 12 \overline{) 45.6} \end{array}$$

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

Examples:

1.) $7.6 \div 4$

2.) $4.38 \div 12$

3.) $18.2 \div 1.4$

4.) $2.6 \div 0.5$

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

2.6**Dividing Decimals HW Day 1****Divide.**

4. $0.7 \overline{)1.4}$

5. $0.5 \overline{)2.65}$

6. $0.6 \overline{)24.6}$

7. $21.6 \div 9$

8. $53.6 \div 0.8$

9. $0.256 \div 4$

10. Describe and correct the error in finding the quotient.

X	2.7
	$5 \overline{)1.35}$
	$\underline{-10}$
	35
	$\underline{-35}$
	0

2.6**Practice DAY 2 HOMEWORK**

For use after Lesson 2.6

Divide. Check your answer.

1. $0.3 \overline{)18.6}$

2. $0.6 \overline{)46.8}$

4. $24.5 \div 7$

5. $0.096 \div 0.8$

7. $3.1 \overline{)17.36}$

8. $6.4 \overline{)43.52}$

13. It costs \$859.32 to have a school dance.

a. How many tickets must be sold to cover the cost?

(Hint: you will need to round your answer)

School DanceOctober 28th
Tickets \$8

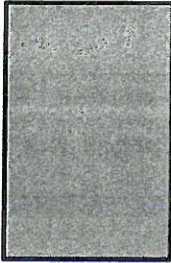
Name _____ Units _____ Date _____

Math 6th: Unit 4 Decimals Study Guide

Total Score: _____/13

Directions: Carefully read and follow the directions for each section. Remember to **SHOW YOUR WORK** and write your answers on the lines provided. Don't forget the correct units!

Total:							
2 points LT1	Solve. 1.) $2.48 + 1.27$ 2.) $1.3 + 1.19$ Score:						
	1.) _____ 2.) _____						
2 points LT1	Solve. 3.) $17.52 - 12.3$ 4.) $9.50 - 7.14$ Score:						
	3.) _____ 4.) _____						
2 points LT2	Use the table to answer the questions. <div style="text-align: center; margin: 10px 0;"><table border="1" style="border-collapse: collapse;"><thead><tr><th>Item</th><th>Cost</th></tr></thead><tbody><tr><td>Apple</td><td>\$0.95</td></tr><tr><td>Water bottle</td><td>\$1.30</td></tr></tbody></table></div> 5a) What is the total cost of an apple and a bottle of water? 5a.) _____ 5b.) You decide to only buy a water bottle and give the cashier \$2.00. How much change do you get back? 5b.) _____	Item	Cost	Apple	\$0.95	Water bottle	\$1.30
Item	Cost						
Apple	\$0.95						
Water bottle	\$1.30						
2 points LT2	Solve. 6.) $0.3 \cdot 0.9$ 7.) $4.3 \cdot 3.5$ Score:						
	6.) _____ 7.) _____						

<p>1 point LT2</p> <p>Score:</p>	<p>8.) Find the area of the rectangle.</p> <div style="text-align: center;">  <p>1.32</p> <p>0.7</p> </div> <p style="text-align: right;">8.) _____</p>
<p>1 point LT2</p> <p>Score:</p>	<p>9.) You buy four boxes of cereal for \$2.51 per cereal box. How much did you spend on cereal?</p> <p style="text-align: right;">9.) _____</p>
<p>2 points LT3</p> <p>Score:</p>	<p>10.) $2.2 \div 0.4$ 11.) $5.25 \div 2.5$</p> <p style="text-align: right;">10.) _____ 11.) _____</p>
<p>1 points LT3</p> <p>Score:</p>	<p>12.) Three friends buy a dessert for \$9.24 and split the cost. How much do they each pay?</p> <p style="text-align: right;">12.) _____</p>

Answers:

1.) 3.75	2.) 2.49	3.) 5.22	4.) 2.36
5a.) \$2.25	5b.) \$0.70	6.) 0.27	7.) 15.05
8.) 0.924	9.) \$10.04	10.) 5.5	11.) 2.1
12.) \$3.08			