



5th Grade

PARENT GUIDE - UNIT 3

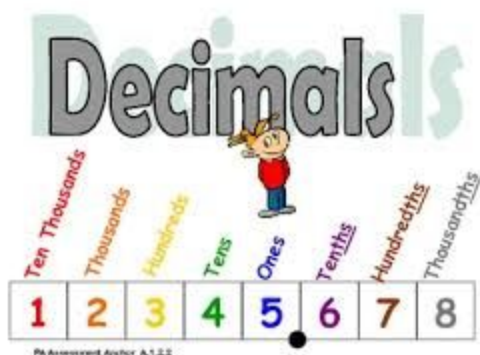
IMPORTANT CONCEPTS YOUR STUDENT SHOULD KNOW AND ACTIVITIES TO DO AT HOME

Add, subtract, multiply and divide decimals ---Operations with Decimals Unit

Important Concepts Addressed in this Unit

Examples

MGSE5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models, drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.



Questions for Students

- Can I add and subtract decimals using the algorithm?
- Can I model multiplying decimals?
- Can I multiply decimals using the algorithm?
- Can I model dividing decimals?
- Can I divide decimals using the algorithm?

This standard requires students to extend the models and strategies they developed for whole numbers in grades 1-4 to decimal values. Before students are asked to give exact answers, they should estimate answers based on their understanding of operations and the value of the numbers.

Examples:

- $3\frac{1}{2} + 1.7$

A student might estimate the sum to be larger than 5 because 3.6 is more than $3\frac{1}{2}$ and 1.7 is more than $1\frac{1}{2}$.

- $5.4 - 0.8$

A student might estimate the answer to be a little more than 4.4 because a number less than 1 is being subtracted.

- 62.4

A student might estimate an answer between 12 and 18 since 6×2 is 12 and 6×3 is 18. Another student might give an estimate of a little less than 15 because s/he figures the answer to be very close, but smaller than $6 \times 2\frac{1}{2}$ and think of $2\frac{1}{2}$ groups of 6 as 12 (2 groups of 6) + $3\frac{1}{2}$ of a group of 6).



5th Grade

PARENT GUIDE - UNIT 3

Key Vocabulary Words

- decimal
- annex
- difference
- model
- product
- quotient
- decimal point
- tenths
- thousandths
- hundredths
- sum

Addition
The decimal point must be lined up!
Just like adding whole numbers, except with a decimal point.

$$\begin{array}{r} 6.8 \\ + 7.06 \\ \hline 13.86 \end{array}$$

← imaginary zero

Subtraction
*Some rules as addition

$$\begin{array}{r} 15.30 \\ - 5.01 \\ \hline 10.29 \end{array}$$

Decimals
A number that uses place value and a decimal point to show value less than 1.

H T O . T C H T H T H

Thirteen and forty-seven hundredths
\$13.47

Multiplication
Multiply just like whole numbers.
The product will have the number of decimal places as the factors have combined.
The decimal places do not need to be lined up!

$$\begin{array}{r} 6.35 \quad \rightarrow 2 \text{ decimal places} \\ \times 3.2 \quad \rightarrow 1 \text{ decimal place} \\ \hline 1270 \\ + 19050 \\ \hline 20320 \quad \rightarrow 3 \text{ decimal places} \end{array}$$

Division
move the decimal in the dividend and the divisor all the way to the right.
Divide like normal!

$$49 \div 7 = 70$$
$$490 \div 7 = 70$$
$$22 \div .02 = 11$$

(No zero)

How You Can Help Your Student

Interactive Learning Games:

Playing games is a wonderful way to practice skills at home in a fun environment.

<https://www.mrnussbaum.com/placevaluepirates>

<http://studyjams.scholastic.com/studyjams/jams/math/decimal-s-percents/mult-of-decimals.htm>

<http://studyjams.scholastic.com/studyjams/jams/math/decimal-s-percents/division-of-decimals.htm>

<http://www.math-play.com/decimal-math-games.html>

<https://www.iknowit.com/lessons/e-multiplying-decimals.html>

Study and understand vocabulary words

Review math journal and key points

Practice skills by reviewing journal, homework assignments, class assignments and use websites. Google Math Classroom has many types of games that your child can show you.

5th Grade

PARENT GUIDE - UNIT 3



Sample Problems