6 Math Unit 02: Fractions & Decimals

Content Area: Mathematics

Course(s):

Time Period: October
Length: 15 days
Status: Published

Unit Overview

By the end of this course, all students should be proficient in adding, subtracting, multiplying, and dividing fractions and decimals. Students were introduced to some of these concepts in prior courses, and now the remaining work will be completed in this course.

Standards

MA.6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division

of fractions by fractions, e.g., by using visual fraction models and equations to represent

the problem.

MA.6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.

MA.6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard

algorithm for each operation.

Materials

Big Ideas Math

- 2.1 Multiplying Fractions
- 2.2 Dividing Fractions
- 2.3 Dividing Mixed Numbers
- 2.4 Adding and Subtracting Decimals
- 2.5 Multiplying Decimals
- 2.6 Dividing Whole Numbers
- 2.7 Dividing Decimals

Desmos

Unit 4: Percents

Unit 5: Algebraic Expressions

Other Resources:

- ST Math
- Delta Math
- 3 Act Lessons

- Brainingcamp Manipulatives
- Nearpod Lessons
- Brainpop Resources
- Online Resources

Technology

- 8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate program development.
 - 8.1.8.DA.1: Organize and transform data collected using computational tools to make it usable for a specific purpose.
 - 8.1.8.DA.5: Test, analyze, and refine computational models.

Assessment

Formative Assessment

- Teacher Observation
- Daily Quick Check
- Quizzes
- Exit Tickets

Summative Assessment

- Topic Tests
- Benchmark Tests
- Alternative Assessments: Performance Tasks & Projects

Accommodations & Modifications

Special Education

- Follow IEP Plan which may contain some of the following examples...
- In class/pull out support with special ed teacher
- Additional time during intervention time
- Preferred seating
- Questions read aloud

- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Limit number of questions
- Scribe
- Manipulatives
- Calculators
- Reteach pages
- Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System
- · Another look homework video
- Practice buddy

504

- In class/pull out support with special ed teacher Additional time during intervention time
- Preferred seating
- Questions read aloud
- Extended time for completing tasks Graphic organizers
- Vocabulary support Mnemonic devices
- Songs/videos to reinforce concepts Limit number of questions
- Scribe Manipulatives Calculators Reteach pages Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System Another look homework video
- Practice buddy

ELL

- Translation device/dictionary
- In class/pull out support with ESL teacher
- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives
- Math Diagnosis & Intervention System

At-risk of Failure

- Additional time during intervention time
- · Questions read aloud
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives

- Calculators
- Reteach pages
- Leveled homework
- Lesson intervention activities
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Gifted & Talented

- Independent projects
- Enrichment pages
- Online games
- Leveled Homework
- Extension Activities
- Today's Challenge

Interdisciplinary Connections

Topic 2 STEM Project - Improve Your School -

In this project, students choose a problem identified in the Topic 1 project and apply the engineering design process to research, plan, test, propose, and present a solution.

Science Connection -

Students apply the engineering design process to find possible solutions to the problem identified.

ELA: NJSLSA.R1. Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Science: MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

21st Century Life Literacies & Key Skills

- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal
- 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping

- 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations.
- 9.4.8.TL.1: Construct a spreadsheet in order to analyze multiple data sets, identify relationships, and facilitate data-based decision-making
- 9.4.8.TL.3: Select appropriate tools to organize and present information digitally.

Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP12. Work productively in teams while using cultural global competence.