Mrs. Rayman's 6th Grade Math Weekly Lesson Plans

Common Core State Standards

6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	**6.RP.3** Use ratio and rate reasoning to solve real-world and mathematical problems, e.g. by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	**6.RP.3a** Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.

Essential Question: *How do you use ratio concepts and ratio reasoning to solve problems?*

Monday Engage NY Lesson 1-25

Objective: Students write a fraction and a decimal as a percent of a whole quantity and write a percent of a whole quantity as a fraction or decimal.

Agenda:
1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=kmVfZ9o-2gg
2. Classwork: Engage NY Lesson 25 Example 1 & 2 and Examples 1-6
3. Exit Ticket: *Show all necessary work to support your answer: 1.) Convert 0.3 to a fraction and a percent 2.) Convert 9% to a fraction and a decimal 3.) Convert ⅜ to a decimal and percent.*
4. Homework: Engage NY Lesson 25 Problem Set/Homework

Tuesday Engage NY Lesson 1-26

Objective: Students will find the percent of a quantity. Given a part and the percent, students solve problems involving finding the whole.

Agenda:
5. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=rR95Cbcjzus
6. Classwork: Engage NY Lesson 26 Example 1-3 and Exercises
7. Exit Ticket: 1.) *Find 40% of 60 using two different things, one of which must include a pictorial model or diagram. 2.) 15% of an amount is 30. Calculate the whole amount using two different strategies, one of which must include a pictorial amount.*
8. Homework: Engage NY Lesson 26 Problem Set/Homework

Wednesday Engage NY Lesson 1-27

Objective: Students will find the percent of a quantity. Given a part and the percent, students solve problems involving finding the whole.

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=rR95Cbcjzus AND https://www.youtube.com/watch?v=Hxh0tsCva8E
2. Classwork: Engage NY Lesson 27 Example 1 and Exercises 1
3. Exit Ticket: *Jane paid $40 for an item after she received a 20% discount. Jane's friend says this means that the original price of the item was $48. A. How do you think Jane's friend arrived at this amount? B. Is her friend correct? Why or why not?*
4. Homework: Engage NY Lesson 27 Problem Set/Homework

Thursday Engage NY Lesson 1-28

Objective: Given a part and the percent, students find the percent of a quantity and solve problems involving finding the whole.
Agenda:

5. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=bYU3X8A0dRM
6. Classwork: Engage NY Lesson 28 Example 1 and Exercise 1
7. Exit Ticket: *1. Write one problem using a dollar amount of $420 and a percent of 40%. Provide the solution to your problem. 2. The sale price of an item is $160 after a 20% discount. What was the original price of the item?*
8. Homework: Engage NY Lesson 28 Problem Set/Homework

Friday- No School for Students

Mrs. Rayman's Daily Instructional Plan- Grade 6 Math

	Monday	Tuesday	Wednesday	Thursday	Friday
Accessing Prior Knowledge - Where are your students headed? Where have they been? How will you make sure the students know where they are going?	Warm Up: Fraction/Percent of the Day Video: https://www.youtube.com/watch?v=kmVfZ9o-2gg	Warm Up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=rR95Cbcjzus	Warm Up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=rR95Cbcjzus AND https://www.youtube.com/watch?v=Hxh0tsCva8E	Warm Up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=bYU3X8A0dRM	**No School**
Guided Practice - What events will help students experience and explore the big idea and questions in the unit? How will you equip them with needed skills and knowledge?	Direct Instruction: Engage NY Lesson 25 Example 1 & 2 and Examples 1-6	Direct Instruction: Engage NY Lesson 26 Example 1-3 and Exercises	Direct Instruction: Engage NY Lesson 27 Example 1 and Exercises 1	Direct Instruction: Engage NY Lesson 28 Example 1 and Exercise 1	
Independent Practice - How will you cause students to reflect and rethink? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all?	Student Ratio Notes and Homework: Engage NY Lesson 25 Problem Set/Homework	Student Ratio Notes and Homework: Engage NY Lesson 26 Problem Set/Homework	Student Ratio Notes and Homework: Engage NY Lesson 27 Problem Set/Homework	Student Ratio Notes and Homework: Engage NY Lesson 28 Problem Set/Homework	
Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit?	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	
Differentiation/Accommodation - How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit?	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	
Learner Outcome - How will students demonstrate, as a result of lesson, their level of mastery? ● Understand ● Know ● Do	Students write a fraction and a decimal as a percent of a whole quantity and write a percent of a whole quantity as a fraction or decimal.	Students will find the percent of a quantity. Given a part and the percent, students solve problems involving finding the whole.	Students will find the percent of a quantity. Given a part and the percent, students solve problems involving finding the whole.	Given a part and the percent, students find the percent of a quantity and solve problems involving finding the whole.	

Mrs. Rayman's 6th Grade Advanced Math
Weekly Lesson Plans

Unit 2 Common Core State Standards

6.NS.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.	**6.NS. 2** Fluently divide multi-digit numbers using the standard algorithm.	**6.NS.3** Fluently add, subtract, multiply, and divide using the standard algorithm for each operation.	**6.NS.3c** Find a percent of a quantity as a rate per 100; solve problems involving finding the whole, given a part of a percent.	**6.NS.4** Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor

Unit 2 Essential Questions:
- *How are Fractions, Decimals, and Percents Related?*
- *How can the quotients of fractions be modeled?*
- *How can knowledge of operations with fractions be applied to operations with decimals and percents?*

Number Sense:
- *Ways to make a number*
- *Ways to solve a math problem mentally*

Monday Engage NY Lesson 2-1

Objective: Students use visual models, such as fraction bars, number lines, and area models, to show the quotient of whole numbers and fractions to show the connection between them and the multiplication of fractions. Students divide a fraction by a whole number.

Agenda:
1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-1 Examples 1-3 and Exercises 1-6
3. Exit Ticket: *Write an equivalent multiplication expression. Then, find the quotient in its simplest form. Use a model to support your response. 1.) ¼ divided by 2   2.) ⅔ divided by 6*
4. Homework: Engage NY Lesson 2-1 Problem Set/Homework

Tuesday Engage NY Lesson 2-2

Objective: Students use fraction bars, number lines, and area models to show the quotient of whole numbers and fractions and to show the connection between those models and the multiplication of fractions. Students understand the difference between a whole number being divided by a fraction and a fraction being divided by a whole number.

Agenda:
1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-2 Examples 1-2 and Exercises 1-5
3. Exit Ticket: *1.) Henry bought 4 pies, which he plans to share with a group of his friends. If there is exactly enough to give each member of the group one-sixth of the pie, how many people are in the group? 2.) Rachel finished ¾ of the race in 6 hours. How long was the entire race?*
4. Homework: Engage NY Lesson 2-2 Problem Set/Homework

Wednesday Engage NY Lesson 2-3

Objective: Students use fraction bars and area models to show the division of fractions by fractions with common denominators.

Agenda:
1. Warm up: Fraction/Percent of the Day AND Video: http://www.youtube.com/watch?v=GOucLlm_vEc
2. Classwork: Engage NY Lesson 2-3 Examples 1-3 and Exercises 1-6
3. Exit Ticket: *1.) Find the quotient. Draw a model to support your solution. 9/4 divided by ¾   2.) 7/3 divided by 2/3*
4. Homework: Engage NY Lesson 2-3 Problem Set/Homework

Thursday Engage NY Lesson 2-4

Objective: Students use use fraction bars and area models to divide fractions by fractions with different denominators. Students will make connections between visual models and multiplication of fractions.

Agenda:
1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=8Tv7WunDsLg
2. Classwork: Engage NY Lesson 2-4 Examples 1-4 and Exercises 1-5
3. Exit Ticket: *1.) Calculate each quotient. If needed, draw a model 9/4 divided by ⅜ 2.) ⅚ divided by ⅔*
4. Homework: Engage NY Lesson 2-4 Problem Set/Homework

Mrs. Rayman's Daily Instructional Plan- Grade 6 Advanced Math

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Accessing Prior Knowledge - Where are your students headed? Where have they been? How will you make sure the students know where they are going?	Warm Up: Fraction/Percent of the Day	Warm Up: Fraction/Percent of the Day	Warm Up: Fraction/Percent of the Day AND Video: http://www.youtube.com/watch?v=GOucLlm_vEc	Warm up: Fraction/Percent of the Day AND Video: http://www.youtube.com/watch?v=GOucLlm_vEc	**No School For Students PD for Staff all day**
Guided Practice - What events will help students experience and explore the big idea and questions in the unit? How will you equip them with needed skills and knowledge?	Direct Instruction: Engage NY Lesson 2-1 Examples 1-3 and Exercises 1-6	Direct Instruction: Engage NY Lesson 2-2 Examples 1-2 and Exercises 1-5	Direct Instruction: Engage NY Lesson 2-3 Example 1 and Exercises 1	Direct Instruction: Engage NY Lesson 2-4	
Independent Practice - How will you cause students to reflect and rethink? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all?	Student Ratio Notes and Homework: Engage NY Lesson 2-1 Problem Set/Homework	Student Ratio Notes and Homework: Engage NY Lesson 2-2 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 2-3 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 2-4 Problem Set/Homework	
Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit?	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	
Differentiation/Accommodation - How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit?	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	
Learner Outcome - How will students demonstrate, as a result of lesson, their level of mastery? ● Understand ● Know ● Do	Students use visual models, such as fraction bars, number lines, and area models, to show the quotient of whole numbers and fractions to show the connection between them and the multiplication of fractions. Students divide a fraction by a whole number.	Students use fraction bars, number lines, and area models to show the quotient of whole numbers and fractions and to show the connection between those models and the multiplication of fractions. Students understand the difference between a whole number being divided by a fraction and a fraction being divided by a whole number.	Students use fraction bars and area models to show the division of fractions by fractions with common denominators.	Students use use fraction bars and area models to divide fractions by fractions with different denominators. Students will make connections between visual models and multiplication of fractions.	