## Mrs. Rayman's 6th Grade 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. 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 2-13

Objective: Students understand that the standard algorithm of division is simply a tally system arranged in place value columns. Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-13 Examples 1-2 Exercises 1-5
3. Exit Ticket: Divide using the division algorithm: 392,196/87
4. Homework: Engage NY Lesson 2-13 Problem Set/Homework

## Tuesday Engage NY Lesson 2-14

Objective: Students use their knowledge of dividing multi-digit numbers to solve for quotients of multi-digit decimals and understand the mathematical concept of decimal placement in the divisor and dividend and its connection to multiplying. Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=KT2rB6VIwPw
2. Classwork: Engage NY Lesson 2-14 Examples 1-2 Exercises 1-7
3. Homework: Engage NY Lesson 2-14 Problem Set/Homework

## Wednesday Engage NY Lesson 2-17

Objective: Students apply divisibility rules, specifically for 33 and 99 , to understand factors and multiples.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-17
3. Exit Ticket:
4. Homework: Engage NY Lesson 2-17 Problem Set/Homework

## Thursday Engage NY Lesson 2-18

Objective: Students find the least common multiple and greatest common factor and apply knowledge of factors to use the distributive property.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=Xg9NgvO8g6Q AND
https://www.youtube.com/watch?v=31M99xiNqm4
2. Classwork: Engage NY Lesson 2-18 Examples 1-2 Stations 1-4
3. Exit Ticket: 1.) Find the LCM and GCF of 12 and 15 2.) Write two numbers, neither of which are 8 , whose GCF is 8 3.) Write two numbers, neither of which is 28, whose LCM is 28. AND Complete the chart (located on the exit ticket print out)
4. Homework: Engage NY Lesson 2-18 Problem Set/Homework

## Thursday Unit 2 Review and MARS Performance Task

Objective: Students will review and study all standards that were covered throughout Unit 2. Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Student Review and Lancer Notes
3. Exit Ticket: Review
4. Homework: Review Sheet/Study Guide- Study for Unit 2 TEST Tomorrow!

## Friday Unit 2 Final TEST

Objective: Students will take an assessment on Unit 2.
Agenda:
5. Warm up: Fraction/Percent of the Day AND Video:
6. Homework: Compass Learning

| 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 AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: https://www.youtub e.com/watch?v= ic W-ZgpRbM | Warm up: Fraction/Percent of the Day AND Video: |
| 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: <br> Engage NY Lesson 2-13 <br> Examples 1-2 and Exercises 1-5 | Direct Instruction: <br> Engage NY Lesson 2-14 Examples 1-2 Exercises 1-7 | Direct Instruction: Engage NY Lesson 2-17 | Direct Instruction: Engage NY Lesson 2-18 Examples 1-2 Stations 1-4 | Direct Instruction: Lancer Notes/Review Sheet for Unit 2 |
| 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 Notes and Homework: <br> Engage NY Lesson 2-13 Problem Set/Homework | Student Notes and Homework: Engage NY Lesson 2-14 Problem Set/Homework | Student Notes and Homework: Engage <br> NY Lesson 2-17 Problem <br> Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 2-18 Problem Set/Homework | Student Notes and Homework: Student Review and Lancer Notes |
| 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 | Exit Tickets and Teacher Observations |
| Differentiation/Accommodatio <br> n - 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 | 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? <br> - Understand <br> - Know <br> - Do | Students understand that the standard algorithm of division is simply a tally system arranged in place value columns. | Students use their knowledge of dividing multi-digit numbers to solve for quotients of multi-digit decimals and understand the mathematical concept of decimal placement in the divisor and dividend and its connection to multiplying. | Students apply divisibility rules, specifically for 33 and 99 , to understand factors and multiples. | Students find the least common multiple and greatest common factor and apply knowledge of factors to use the distributive property. | Students will review and study all standards that were covered throughout Unit 2. |

## Unit 3 Common Core State Standards

6.NS. 5 Understand that positive and negative numbers are used togethers to describe quantities having opposite directions or values; use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
> 6.NS. 6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
6.NS.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a numbers is the numbers itself, $-(-3)=3$, and that 0 is its own opposite.
6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
6.NS. 5 Understand that positive and negative numbers are used togethers to describe quantities having opposite directions or values; use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

## Unit 3 Essential Questions:

- How do graphing points on the coordinate system help in solving problems?
- How does absolute value help us to understand distance on a coordinate plane and support a deeper understanding of the relationship between positive and negative rational numbers?


## Number Sense:

- Count around the room
- Ways to make a number
- Organic number line


## Monday Engage NY Lesson 3-9

Objective: Students will compare and interpret rational numbers' order on the number line, making statements that relate the numbers' location on the number line to their order.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=Oq2KoAGrY64
2. Classwork: Engage NY Lesson 3-9 Examples 1-2 and Exercises 1-6
3. Homework: Engage NY Lesson 3-9 Problem Set/Homework

## Tuesday Engage NY Lesson 3-10

Objective: Students write and explain inequality statements involving rational numbers. Students justify inequality statements involving rational numbers.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 3-10 Examples 1-2 and Exercises 1-9
3. Homework: Engage NY Lesson 3-10 Problem Set/Homework

## Wednesday Engage NY Lesson 3-11

Objective: Students understand that each nonzero integer, $a$, has an opposite, denoted $-a$, and that -a and a are opposites if they are on opposite sides of zero and are the same distance from zero on the number line. Students will recognize that zero is it's own opposite. Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=LxllUeusDYY
2. Classwork: Engage NY Lesson 3-11 Examples 1-2 and Exercises 1-19
3. Homework: Engage NY Lesson 3-11 Problem Set/Homework

## Thursday Engage NY Lesson 3-12

Objective: Students understand that the order of positive numbers is the same as the order of their absolute values. Students understand that the order of negative numbers is the opposite order of their absolute value. They also understand that negative numbers are always less than positive numbers.

Agenda:
4. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=LxllUeusDYY
5. Classwork: Engage NY Lesson 3-12 Examples 1-2 and Exercises 1-2
6. Homework: Engage NY Lesson 3-12 Problem Set/Homework

## Friday Engage NY Lesson 3-13 OR 14 (See Pacing Guide)

Objective: Students apply understanding of order and absolute value when examining real-world scenarios. Students realize, for instance, that the depth of a location below sea level is the absolute value of a negative number, while the height of an object above sea level is the absolute value of a positive number.

## Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=Lx\|lUUeusDYY
2. Classwork: Engage NY Lesson 3-13 Examples 1-2 and Exercises 1-6
3. Homework: Engage NY Lesson 3-13 Problem Set/Homework

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

|  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accessing Prior Knowledge - <br> 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 AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: |
| 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 3-9 Examples 1-2 and Exercises 1-6 | Direct Instruction: Engage NY Lesson 3-10 | Direct Instruction: Engage NY Lesson 3-11 Examples 1-2 and Exercises 1-6 | Direct Instruction: Engage NY Lessons 3-12 | Direct Instruction: Engage NY Lessons 3-14 |
| 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 Notes and Homework: <br> Engage NY Lesson 3-9 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 3-10 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 3-11 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 3-12 and 3-6 Problem <br> Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 3-14 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 | Exit Tickets and Teacher Observations |
| Differentiation/Accommodation - <br> 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 | 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? <br> - Understand <br> - Know <br> - Do | Students will compare and interpret rational numbers' order on the number line, making statements that relate the numbers' location on the number line to their order. | Students write and explain inequality statements involving rational numbers. Students justify inequality statements involving rational numbers. | Students understand that each nonzero integer, a, has an opposite, denoted -a , and that -a and a are opposites if they are on opposite sides of zero and are the same distance from zero on the number line. Students will recognize that zero is it's own opposite. | Students understand that the order of positive numbers is the same as the order of their absolute values. <br> Students understand that the order of negative numbers is the opposite order of their absolute value. They also understand that negative numbers are always less than positive numbers. | Students use ordered pairs to name points in a grid and to locate points on a map. Students identify the first number in an ordered pair as the first coordinate and the second number as the second coordinate. |

