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

## 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 number is the number 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 3-18

Objective: Students compute the length of horizontal and vertical line segments with integer coordinates for end points in the coordinate plane by counting the number of units between end points and using absolute value.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=CARkStA-QSc
2. Classwork: Engage NY Lesson 3-18 Examples 1-3
3. Homework: Engage NY Lesson 3-18 Problem Set/Homework

## Tuesday Engage NY Lesson 3-19

Objective: Students solve problems related to the distance between points that lie on the same horizontal or vertical line. Students use the coordinate plane to graph points, line segments, and geometric shapes in various quadrants and then use the absolute value to find
the related points. Students will review all standards for Unit 3 and go through a series of questions to study for the Unit 3 Test Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=_QsR8xPCgc
2. Classwork: Engage NY Lesson 3-19 Exercises 1-7
3. Homework: Engage NY Lesson 3-19 Problem Set/Homework

## Wednesday: Unit 3 Review

Objective: Students will review all of the standards that they have learned throughout Unit 3 and work on a Unit 3 Review to study and reinforce standards learned.

## Agenda:

4. Warm up: Fraction/Percent of the Day AND Video:
5. Classwork: Unit 3 Review
6. Homework: Compass Learning for Extra Credit

## Thursday AND Friday: Unit 3 Assessment

Objective: Students will take the Unit 3 Assessment to determine what they have learned throughout unit 3.

## Agenda:

7. Warm up: Fraction/Percent of the Day AND Video:
8. Classwork: Unit 3 Assessment
9. Homework: Compass Learning for Extra Credit

| 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: | 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 3-18 | Direct Instruction: Engage NY Lessons 3-19 | Direct Instruction: Unit 3 Review | Direct Instruction: Unit 3 TEST | Direct Instruction: Unit 3 TEST |
| 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 3-18 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 3-19 Problem Set/Homework | Student Notes and Homework: <br> Student Work Pages | Student Notes and Homework: Student Work Pages | Student Notes and Homework: <br> Student Work Pages |
| 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 compute the length of horizontal and vertical line segments with integer coordinates for end points in the coordinate plane by counting the number of units between end points and using absolute value. | Students solve problems related to the distance between points that lie on the same horizontal or vertical line. Students use the coordinate plane to graph points, line segments, and geometric shapes in various quadrants and then use the absolute value to find the related points. | Students will review all of the standards that they have learned throughout Unit 3 and work on a Unit 3 Review to study and reinforce standards learned. | Students will take the Unit 3 Assessment to determine what they have learned and if they have mastered all of the objectives taught throughout unit 3. | Students will take the Unit 3 Assessment to determine what they have learned and if they have mastered all of the objectives taught throughout unit 3 . |

Mrs. Rayman's 6th Grade Advanced Math

## Unit 4 Common Core State Standards

| 6.EE. 1 Write and |
| :--- | :--- | :--- | :--- | :--- |
| evaluate numerical |
| expressions |
| involving |
| whole-number |
| exponents. |$\quad$| 6.EE.2 Write, read, and |
| :--- |
| evaluate expressions in |
| which letters stand for |
| numbers. |$\quad$| 6.EE.2c Evaluate expressions at specific |
| :--- |
| values of their variables. Include |
| expressions that arise from formulas used |
| in real-world problems. Perform |
| arithmetic operations, including those |
| involving whole-number exponents, in the |
| conventional order when there are no |
| parentheses to specify a particular order |
| (Order of Operations) |$\quad$| 6.EE.Apply <br> the properties of <br> operations to <br> generate <br> equivalent <br> expressions. |
| :--- | | 6.EE. 4 Identify when |
| :--- |
| two expressions are |
| equivalent (i.e. when |
| the two expressions |
| name the same number |
| regardless of which |
| value is substituted into |
| them). |

## Unit 4 Essential Questions:

- How can one use algebraic symbols to write equations and inequalities representing real-world situations?
- How can one solve one-step equations and use substitution to determine if a given value is a solution?


## Number Sense:

- Ways to make an equivalent expression
- Ways to make a solution
- Always, sometimes, never
- What's my rule?


## Monday Engage NY Lesson 4-13

Objective: Students write numerical expressions in two forms "dividend / divisor" and "dividend divided by divisor", and note the relationship between the two.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 4-13
3. Homework: Engage NY Lesson 4-13 Problem Set/Homework

## Tuesday Engage NY Lesson 4-14

Objective: Students write numerical expressions in two forms, "dividend / divisor" and dividend divided by divisor, and note the relationship between the two.
Agenda:

1. Warm up: Fraction/Percent of the Day
2. Classwork: Engage NY Lesson 4-14
3. Homework: Engage NY Lesson 4-14 Problem Set/Homework

## Wednesday Engage NY Lesson 4-15

Objective: Students read expressions in which letters stand for numbers. They assign operation terms to operations when reading. Agenda:

1. Warm up: Fraction/Percent of the Day
2. Classwork: Engage NY Lesson 4-15
3. Homework: Engage NY Lesson 4-15 Problem Set/Homework

## Thursday Engage NY Lesson 4-16

Objective: Students write algebraic expressions that record all operations with numbers and letters standing for the numbers.
Agenda:
4. Warm up: Fraction/Percent of the Day
5. Classwork: Engage NY Lesson 4-16
6. Homework: Engage NY Lesson 4-16 Problem Set/Homework

## Friday Engage NY Lesson 4-17

Objective:Students write algebraic expressions that record all operations with numbers and/or letters standing for numbers.
Agenda:

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

## Mrs. Rayman's Daily Instructional Plan- Grade 6 Advanced 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: | 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 4-13 | Direct Instruction: Engage NY Lesson 4-14 | Direct Instruction: Engage NY Lesson 4-15 | Direct Instruction: Engage NY Lesson 4-16 | Direct Instruction: Engage NY Lesson 4-17 |
| 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 4-13 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 4-14 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 4-15 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 4-16 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 4-17 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 <br> 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 write numerical expressions in two forms "dividend / divisor" and "dividend divided by divisor", and note the relationship between the two. | Students write numerical expressions in two forms "dividend / divisor" and "dividend divided by divisor", and note the relationship between the two. | Students read expressions in which letters stand for numbers. They assign operation terms to operations when reading. | Students read expressions in which letters stand for numbers. They assign operation terms to operations when reading. | Students write algebraic expressions that record all operations with numbers and/or letters standing for numbers. |

