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

Date: Week of February 3, 2020

Unit 4 Common Core State Standards

6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.	**6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers.	**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)	**6.EE.3** Apply the properties of operations to generate equivalent 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?*

<u>Monday Engage NY Lesson 4-3 & 4-4</u>

Objective: Students build and clarify the relationship of multiplication and addition by evaluating identities such as 3 x g= g + g + g
Students build and clarify the relationship of division and subtraction by determining that 12 / x = 4 means 12- x- x- x- x= 0

Agenda:

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

Tuesday Engage NY Lesson 4-5

Objective: Students discover that 3x= x + x + x is NOT the same thing as x^3. Which is x * x * x Students understand that a base number can be represented with a positive whole number, positive fraction, or positive decimal and that for any number a, a^m is defined as the product of m factors of a. The number a is the base, and m is called the exponent or power of a.

Agenda:

4. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=ZJDb7E6aCrA
5. Classwork: Engage NY Lesson 4-5
6. Homework: Engage NY Lesson 4-5 Problem Set/Homework

Wednesday Engage NY Lesson 4-6

Objective: Students evaluate numerical expressions. They recognize that in the absence of parentheses, exponents are evaluated first.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=S3IEeCyUWWA
2. Classwork: Engage NY Lesson 4-6
3. Homework: Engage NY Lesson 4-6 Problem Set/Homework

Thursday Engage NY Lesson 4-7

Objective: Students understand that a letter represents one number in an expression. When that number replaces the letter, the expression can be evaluated to one number.

Agenda:

1. Warm up: Fraction/Percent of the Day
2. Classwork: Engage NY Lesson 4-7
3. Exit Ticket: Rate/Evaluate how you performed in math class today.
4. Homework: Engage NY Lesson 4-7 Homework/Problem Set

Friday Engage NY Lesson 4-9 & 4-10

Objective: Students write expressions that record addition and subtraction operations with numbers/. Students identify parts of an expression using mathematical terms for multiplication. They view one or more parts of an expression as a single entity.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://youtu.be/NybHckSEQBI
2. Classwork: Engage NY Lesson 4-9 and 4-10
3. Homework: Engage NY Lesson 4-9 & 4-10 Problem Set/Homework

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 Lessons 4-3 & 4-4	Direct Instruction: Engage NY Lesson 4-5 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lesson 4-6 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lesson 4-7	Direct Instruction: Engage NY Lesson 4-9 & 10
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: Engage NY Lesson 4-3 & 4-4 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-5 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-6 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-7 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-9 & 4-10 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 - 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? • Understand • Know • Do	Students build and clarify the relationship of multiplication and addition by evaluating identities such as 3 x g= g + g + g Students build and clarify the relationship of division and subtraction by determining that 12 / x = 4 means 12- x- x- x- x= 0	Students discover that 3x= x + x + x is NOT the same thing as x^3. Which is x * x * x Students understand that a base number can be represented with a positive whole number, positive fraction, or positive decimal and that for any number a, a^m is defined as the product of m factors of a. The number a is the base, and m is called the exponent or power of a.	Students evaluate numerical expressions. They recognize that in the absence of parentheses, exponents are evaluated first.	Students understand that a letter represents one number in an expression. When that number replaces the letter, the expression can be evaluated to one number.	Students write expressions that record addition and subtraction operations with numbers/. Students identify parts of an expression using mathematical terms for multiplication. They view one or more parts of an expression as a single entity.

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

Date: Week of February 3, 2020

Unit 4 Common Core State Standards

6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.	**6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers.	**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)	**6.EE.3** Apply the properties of operations to generate equivalent 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 4-24

Objective: Students identify values for the variables in equations and inequalities that result in true and false number sentences.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 4-24
3. Homework: Engage NY Lesson 4-24 Problem Set/Homework

Tuesday Engage NY Lesson 4-25

Objective: Students learn the definition of solution in the context of placing a value into a variable to see if that value makes the equation true.

Agenda:

4. Warm up: Fraction/Percent of the Day AND Video:
5. Classwork: Engage NY Lesson 4-25
6. Homework: Engage NY Lesson 4-25 Problem Set/Homework

Wednesday Engage NY Lesson 4-26

Objective: Students solve one-step equations by relating an equation to a diagram. Students check to determine if their solutions make the equations true.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 4-26 Examples 1-3 and Exercises 1-4
3. Homework: Engage NY Lesson 4-26 Problem Set/Homework

Wednesday Engage NY Lesson 4-27

Objective: Students solve one-step equations by relating an equation to a diagram. Students check to determine if their solutions make the equations true.

Agenda:

4. Warm up: Fraction/Percent of the Day AND Video:
5. Classwork: Engage NY Lesson 4-27 Examples 1-2 and Exercises 1-2
6. Homework: Engage NY Lesson 4-27 Problem Set/Homework

Thursday Engage NY Lesson 4-28

Objective: Students calculate the solutions of two-step equations by using their knowledge of order of operations and the properties of equality for addition, subtraction, multiplication, and division. Students employ tape diagrams to determine if their solutions make the equations true.

Agenda:

7. Warm up: Fraction/Percent of the Day AND Video:
8. Classwork: Engage NY Lesson 4-28 Examples 1-3 and Exercises 1-6
9. Homework: Engage NY Lesson 4-28 Problem Set/Homework

Friday Engage NY Lesson 4-34

Objective: Students recognize that inequalities where a variable and is a fixed number, have infinitely many solutions when the values of come from a set of rational numbers.

Agenda:

1. Warm up: Ways to Make a Number AND Video:
2. Classwork: Engage NY Lesson 4-34 Examples 1-2 and Exercises 1-2
3. Homework: Engage NY Lesson 4-34 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 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 4-24 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lesson 4-25	Direct Instruction: Engage NY Lesson 4-26 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lessons 4-27	Direct Instruction: Engage NY Lesson 4-28 Examples 1-2 and Exercises 1-6
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: Engage NY Lesson 4-24 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-25 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-26 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-27 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 4-28 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	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	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 identify values for the variables in equations and inequalities that result in true and false number sentences.	Students learn the definition of solution in the context of placing a value into a variable to see if that value makes the equation true.	Students solve one-step equations by relating an equation to a diagram. Students check to determine if their solutions make the equations true.	Students solve one-step equations by relating an equation to a diagram. Students check to determine if their solutions make the equations true.	Students calculate the solutions of two-step equations by using their knowledge of order of operations and the properties of equality for addition, subtraction, multiplication, and division. Students employ tape diagrams to determine if their solutions make the equations true.