

Unit 3 Common Core State Standards

6.NS.5 Understand that positive and negative numbers are used together 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 together 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.
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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-Tuesday NWEA Testing (Winter 2019) ALL CLASSES!

Wednesday Engage NY Lesson 3-1 & 3-2

Objective: Students extend their understanding of the number line, which includes zero and numbers to the right or above zero that are greater than zero and numbers to the left or below zero that are less than zero. Students use positive integers to locate negative integers by moving in the opposite direction from zero. Students use positive and negative numbers to indicate change in elevation with a fixed reference point.

Agenda:

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

Thursday Engage NY Lesson 3-4

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 its own opposite.

Agenda:

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

Friday Engage NY Lesson 3-5 and Lesson 3-6

Objective: Students will learn that the opposite of an opposite will be the original number- for example $-(-25) = 25$. Students will use the number lines that extend in both directions and use 0 and 1 to locate integers and rational numbers on the number line.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=_BgbIvF90UE
2. Classwork: Engage NY Lesson 3-5 and 3-6
3. Homework: Engage NY Lesson 3-5 and 3-6 Problem Set/Homework

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

	Monday	Tuesday	Wednesday	Thursday	Friday
Accessing Prior Knowledge - <i>Where</i> are your students headed? Where have they been? How will you make sure the students know where they are going?	NWEA Winter 2019 TESTING!	NWEA Winter 2019 TESTING!	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 <i>experience and explore</i> the big idea and questions in the unit? How will you equip them with needed skills and knowledge?	NWEA Winter 2019 TESTING!	NWEA Winter 2019 TESTING!	Direct Instruction: Engage NY Lesson 3-1 Examples 1-2 and Exercises 1-5	Direct Instruction: Engage NY Lesson 3-4 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lessons 3-5 and 3-6
Independent Practice - How will you cause students to <i>reflect and rethink</i> ? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all?	NWEA Winter 2019 TESTING!	NWEA Winter 2019 TESTING!	Student Notes and Homework: Engage NY Lesson 3-1 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 3-4 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 3-5 and 3-6 Problem Set/Homework
Assessing Knowledge - How will you help students to <i>exhibit and self-evaluate</i> their growing skills, knowledge, and understanding throughout the unit?	NWEA Winter 2019 TESTING!	NWEA Winter 2019 TESTING!	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations
Differentiation/Accommodation - How will you <i>tailor</i> and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit?	NWEA Winter 2019 TESTING!	NWEA Winter 2019 TESTING!	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 <i>demonstrate</i> , as a result of lesson, their level of mastery? <ul style="list-style-type: none"> ● Understand ● Know ● Do 	NWEA Winter 2019 TESTING!	NWEA Winter 2019 TESTING!	Students extend their understanding of the number line, which includes zero and numbers to the right or above zero that are greater than zero and numbers to the left or below zero that are less than zero. Students use positive integers to locate negative integers by moving in the opposite direction from zero.	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 its own opposite.	Students will learn that the opposite of an opposite will be the original number- for example $-(-25)= 25$. Students will use the number lines that extend in both directions and use 0 and 1 to locate integers and rational numbers on the number line.

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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

Wednesday 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=LxIIJeusDYY>
2. Classwork: Engage NY Lesson 3-13 Examples 1-2 and Exercises 1-6
3. Homework: Engage NY Lesson 3-13 Problem Set/Homework

Thursday Engage NY Lesson 3-15

Objective: Students extend their understanding of the coordinate plane to include all four quadrants and recognize that axes (identified as the x-axis and the y-axis) of the coordinate plane divide the plane into four regions called quadrants. They identify the origin and locate points other than the origin, which lie on an axis. They can locate points in the coordinate plane that correspond to given ordered pairs of integers and other rational numbers.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: <https://www.youtube.com/watch?v=LxIIUeusDYY>
2. Classwork: Engage NY Lesson 3-15 Examples 1-3 and Exercises 1-6
3. Homework: Engage NY Lesson 3-15 Problem Set/Homework

Friday Engage NY Lesson 3-16

Objective: Students understand that two numbers are said to differ only by the signs if they are opposite of each other. Students recognize that when two ordered pairs differ only by the sign of one or both of the coordinates, then the locations of the points are related by reflections across one or both axes.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 3-16 Examples 1-2 and Exercises 1-2
3. Homework: Engage NY Lesson 3-16 Problem Set/Homework

Friday Engage NY Lesson 3-17

Objective: Students draw a coordinate plane on graph paper in two steps (1) Draw and label the horizontal and vertical axis; (2) Mark the number scale on each axis. Given some points as ordered pairs, students make reasonable choices for scales on both axes and locate and label the points on graph paper.

Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: <https://www.youtube.com/watch?v=1O12C9EcdFo> and <https://www.youtube.com/watch?v=r16l6LB2YbQ>
2. Classwork: Engage NY Lesson 3-17 Examples 1-4
3. Homework: Engage NY Lesson 3-17 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?	NWEA Winter 2019 TESTING!	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?	NWEA Winter 2019 TESTING!	Direct Instruction: Engage NY Lessons 3-14	Direct Instruction: Engage NY Lesson 3-15 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lesson 3-16 Examples 1-2 and Exercises 1-6	Direct Instruction: Engage NY Lessons 3-17
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?	NWEA Winter 2019 TESTING!	Student Notes and Homework: Engage NY Lesson 3-14 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 3-15 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 3-16 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 3-17 Problem Set/Homework
Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit?	NWEA Winter 2019 TESTING!	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?	NWEA Winter 2019 TESTING!	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? <ul style="list-style-type: none"> ● Understand ● Know ● Do 	NWEA Winter 2019 TESTING!	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 <i>first coordinate</i> and the second number as the <i>second coordinate</i> .	Students extend their understanding of the coordinate plane to include all four quadrants and recognize that axes (identified as the x-axis and the y-axis) of the coordinate plane divide the plane into four regions called quadrants. They identify the origin and locate points other than the origin, which lie on an axis. They can locate points in the coordinate plane that correspond to given ordered pairs of integers and other rational numbers.	Students understand that two numbers are said to differ only by the signs if they are opposite of each other. Students recognize that when two ordered pairs differ only by the sign of one or both of the coordinates, then the locations of the points are related by reflections across one or both axes.	Students draw a coordinate plane on graph paper in two steps (1) Draw and label the horizontal and vertical axis; (2) Mark the number scale on each axis. Given some points as ordered pairs, students make reasonable choices for scales on both axes and locate and label the points on graph paper.