**Instructor:** Mrs. Breazeale

**Subject/Grade:** 7th/Math

**Week 9: December 13, 2022**

**School:** GCMS

**Unit Title: Exam Week**

**2nd Quarter**

**7th Grade Math Standards**

**6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply techniques in the context of solving real-world and mathematical problems.

**7.EE.1.** Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

**7.EE.2.** Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, a +0.05a=1.05a means that “increase by 5%” is the same as “multiply 1.05.”

**7.EE.3.** Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: if a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 ¾ inches long in the center of a door that is 27 ½ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

**7.EE.4.** Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.

1. Solve word problems leading to equations of the form px + q = r and p(x + q) = r, where p,q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?*

**7.RP** Analyze proportional relationships and use them to solve real-world and mathematical problems.

**7.RP.1.** Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. For example, if a person walks ½ mile in each ¼ hour, compute the unit rate as the complex fraction ½ / ¼ miles per hour, equivalently 2 miles per hour.

**7.RP.2.**  Recognize and represent proportional relationships between quantities.

1. Decide whether two quantities are in a proportional relationship, e.g by testing equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
2. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
3. Represent proportional relationships by equations. For example, if cost *t* is proportional to the number of items purchased at a constant price *p*, the relationship between the total cost and the number of items can be expressed as *t = pn*.
4. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0,0) and (1,r) where r is the unit rate.

**7.RP.3** Use proportional relationships to solve multi-step ratio and percent problems. Examples: simple interest, tax markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

**Essential Question:** How can mathematicians use mathematical properties as strategies to add, subtract, factor, and expand linear expressions with rational coefficients?

**Daily Focus Questions Preview**

**DCA Schedule!**

| **Date** | **Day** | **Focus Question** | **I will…** |
| --- | --- | --- | --- |
| **12/12** | **M** | How do I use properties of complementary, supplementary, vertical, and adjacent angles to find unknown angle measures? | Use properties of complementary, supplementary, vertical, and adjacent angles to find unknown angle measures. |
| **12/13** | **T** | How do I use properties of complementary, supplementary, vertical, and adjacent angles to find unknown angle measures? | Use properties of complementary, supplementary, vertical, and adjacent angles to find unknown angle measures. |
| **12/14** | **W** | How will I use math prodigy to enhance my mathematical skills? | Use math prodigy to enhance mathematical skills.. |
| **12/15** | **Th** | How will I use math prodigy to enhance my mathematical skills? | Use math prodigy to enhance mathematical skills.. |
| **12/16** | **F** | How can I solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form? | Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form. |

**REMEDIATION & ENRICHMENT**

During 1st activity – Tuesdays and Thursdays, the students will work in small groups with a teacher on 7.EE.4 and 7.G.5.

Bubble Students-During the guided practice, the student will model problems on the board for their classmates. These students will be subject to peer tutoring B25 students.

Top 25% During the independent activity, the students will construct two questions for their classmates to answer based on the problems presented in the lesson from Mrs. Breazeale. These students will be called on to ask questions bubble students and B25 students might be too afraid to ask.

Previous Year’s RCC workbook pages will be used.

**December 12th & 13th, (Monday & Tuesday)**

**Lesson Duration: (50 minutes)**

**Printed Materials:** N/A

**Materials:** calculators, scratch paper

**Technology:** Promethean Board, Projector, chromebooks, headphones

**Pre Class:** TSW will copy the lesson objectives from the iReady lesson.

**Independent Practice: (~50 minutes)**

*The student will…*

* Complete “Understand Angle Relationships.” (7.G.5)

**Teacher Interventions:**

The teacher will…

* Pull 2-5 students per class period to tutor skills struggling with former and current math standards.

Early Finishers will get their 45 minutes in Math iReady.

**Assessment:**  Completed iReady Lessons

**December 14th & 15th, (Wednesday & Thursday)**

**Lesson Duration: (50 minutes)**

**Printed Materials:** N/A

**Materials:** calculators, scratch paper

**Technology:** Promethean Board, Projector, chromebooks, headphones

**Pre Class:** TSW will copy the lesson objectives from the iReady lesson.

**Independent Practice: (~50 minutes)**

*The student will…*

* Practice the following skills on Math Prodigy: 7.NS3, 7.RP.1, 7.EE.1, & 7.EE.4

**Teacher Interventions:**

The teacher will…

* Pull 2-5 students per class period to tutor skills struggling with former and current math standards.

Early Finishers will get their 45 minutes in Math iReady.

**December 16, 2022 (Friday)**

**Focus Question:** How can I solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form?

**Bell Ringer:** Students complete a MAAP style problem. **(5 minutes)**

| **Anticipatory Set/Introduction (3 minutes)** |
| --- |
| Shows students MS state standard we will be focusing on today, then explain what we are learning, why we are learning it, and how they will know they mastered it. |
| **Teacher Input (10 minutes)** |
| *The teacher will…*   * Review the commutative, associative, and distributive properties. * Have students open their workbooks to pages 146-147. * Call on different students to read ***a*** through ***e*** as we answer as a group. * Call on different students to read through page 147. * Direct students to complete “Reflection” |
| **Guided/Independent Practice (15 minutes)** |
| *The teacher will…*   * Discuss the new problem on Page 148 and point out the models. * Help students complete page 149. (Discuss) * Talk through 150-151. |
| **Independent Practice (15 minute)** |
| *The student will…*   * Work with a partner to complete 1-5 on pages 154-155. * Discuss correct answers. |
| **Closure (5 minutes)** |
| *The student will…*   * Complete an exit ticket. |