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| **Common Core Strand** | **Cluster** | **Standard** | **Learning Targets**  7th Grade Math Curriculum Map – 2nd Quarter | **Resources** | **Vocabulary** |
| **Ratios and Proportional Relationships** | **Analyze proportional relationships and use them to solve real-world and mathematical problems.** | 7.RP.1 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 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/1/4 miles per hour, equivalently 2 miles per hour. | I can compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. | Lessons 5-1A, 5-1B, 5-1D Additional Lesson 1: p. 759-764 complex fractions and unit rates | ratio, rate, unit rate |
| 7.RP.2a 2. Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. | I can recognize and represent proportional relationships between quantities. | Lessons 5-1C, 7-3B, 7-3C Additional Lesson 2: P. 765-770 Graph proportional relationships | proportional relationships, constant of proportionality, unit rate, equivalent ratios, origin |
| 7.RP.2b 2. Recognize and represent proportional relationships between quantities. b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. | I can identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. | Lessons 5-1D: Solve proportions  7-3C: Direct variation | proportional relationships, constant of proportionality, unit rate, equivalent ratios, origin |
| **Ratios and Proportional Relationships** | **Analyze proportional relationships and use them to solve real-world and mathematical problems.** | 7.RP.2c 2. Recognize and represent proportional relationships between quantities. c. Represent proportional relationships by equations. For example, if total cost t is proportional to the number n 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. | I can represent proportional relationships by equations. For example, if total cost t is proportional to the number n 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. | Lessons  5-1D: Solve proportions 6-2C: Percent equations 7-3C: Direct variations | proportional relationships, constant of proportionality, unit rate, equivalent ratios, origin |
| 7.RP.2d 2. Recognize and represent proportional relationships between quantities. d. 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. | I can 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. | Additional Lesson 2 : p. 765-770: Graph proportional relationships | proportional relationships, constant of proportionality, unit rate, equivalent ratios, origin |
| 7.RP.3 3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. | I can use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. | Chapter 5: Proportions and similarity Chapter 6: Percent | proportional  relationship, ratio, percent |
| **Expressions and Equations** | **Solve real-life and mathematical problems using numerical and algebraic expressions and equations.** | 7.EE.4a 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. a. 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? | I can use a variable to represent a unknown quantity. | Chapter 4: Equations and Inequalities | variable,  coefficient, equation, formula, equivalent equations |
| **Expressions and Equations** | **Solve real-life and mathematical problems using numerical and algebraic expressions and equations.** | 7.EE.4b 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. b. Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions. | I can solve word problems leading to inequalities and graph the solution set of the inequality. | Additional Lesson 9:  p. 787-790: Solve two-step inequalities. | Inequalities,  Rational number |