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|  | *Roger Ludlowe Middle School - Fairfield Woods Middle School –  Tomlinson Middle School*  **Transition to Pre-Algebra** | |
| Barbara O’Brien | TMS114 |
| 2014-15 | Period 4 |
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| COURSE DESCRIPTION | | |
| In the Transition to Pre-Algebra course, the instructional time should focus on six critical areas: (1) completing the understanding of division of fractions; (2) connecting ratio and rate to whole number multiplication and division, and using concepts of ratio and rate to solve problems, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; (4) developing understanding of statistical thinking, (5) extending the concept of area to surface area and volume, and (6) and extending the notion of number to the system of rational numbers for all operations. | | |
| COURSE OBJECTIVES | | |
| Students should:   * Understand ratio concepts and use ratio reasoning to solve problems. * Apply and extend previous understandings of multiplication and division to divide fractions by fractions. * Compute fluently with multi-digit numbers and find common factors and multiples. * Apply and extend previous understandings of numbers to the system of rational numbers. * Apply and extend previous understandings of arithmetic to algebraic expressions. * Reason about and solve one-variable equations and inequalities. * Represent and analyze quantitative relationships between dependent and independent variables. * Solve real-world and mathematical problems involving area, surface area, and volume. * Develop understanding of statistical variability. * Summarize and describe distributions. * Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. * Analyze proportional relationships and use them to solve real-world and mathematical problems. | | |
| UNITS OF STUDY | | |
| * Operating with Positive Rational Numbers * Using Expressions and Equations * Applications of Geometry Numbers * Ratios and Rates * Understanding Positive and Negative Numbers * Algebraic Reasoning * Statistics and Distributions * Operating with Rational Numbers * Proportional Relationships | | |

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| COURSE POLICIES AND REQUIREMENTS | | |
| GRADING | | |
|  | Summative Assessments: | 60% Total  May Include: Individual Tests, Projects, Mid-Chapter Tests |
|  | Formative Assessments: | 30% Total  May Include: Quizzes, Class Presentations |
|  | Behavioral Characteristics: | 10% Total  May Include: Homework, Participation |

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| MATERIALS | |
|  | Textbook, binder, spiral notebook, calculator, pencils etc. |
| EXPECTATIONS OF STUDENTS | |
|  | To be respectful to all other individuals and all property To be prepared and on time with appropriate materials and assignments To be responsible for any missed work and notes To be motivated to learn and accept challenges |
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