MATH 7

Apply and Extend Understanding of Operations with Rational Numbers

- Apply previous understanding of operations with rational numbers to include integers and negative rational numbers (Operations with all other rational numbers are being practiced in Math 7, with integers being new at this point in Math 7)

Understand and Apply Proportional Reasoning

- Compute unit rates
- Recognize and represent proportional relationships between quantities using multiple representations
- Use proportional relationships to solve multi-step and percent problems
- Solve problems using scale drawings of geometric figures

Simplify Expressions and Solve Equations

- Apply properties of operations to factor, expand and convert between forms of an expression
- Assess reasonableness of solutions
- Use variables to represent quantities to construct and solve real-world equations and inequalities. For example: $px+q<r$

Represent and Analyze Relationships

- Solve problems using numerical and algebraic equations
- Draw inferences about two populations
- Investigate probability models

Mathematical Practices

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning