

## Unit 1: Introduction to Algebra

- Solve multi-step equations. Including two-step, like terms in one expression, variables in both expressions, literal equations, fractions/decimals, distributive property
- Solve equations with no solution or all real numbers as a solution.
- Determine if given number properties are true for all real numbers or no real numbers.
- Construct number properties using formulas and number sense. (memorization of properties should not be the focus)
- Identify an arithmetic sequence.
- Distinguish between an arithmetic and geometric sequence
- Find future values of an arithmetic sequence using both the recursive and explicit formulas.
- Find missing values from the explicit formula if given specific parts of an arithmetic sequence.
- Model and solve basic word problems (including problems involving circles, geometry, and number sense)
- Solve and graph two step inequalities.
- Solve and graph compound inequalities.
- Solve and graph Absolute Value equations.
- Solve and graph Absolute Value Inequalities.
- Solve basic Absolute value equation/inequality word problems in the form  $|x-m|=n$
- Understand the properties of an Absolute Value equation