Test Topics

- Arithmetic Skills
 - Simplifying fractions
 - Adding, subtracting, multiplying and dividing fractions
 - Using decimals
 - Using percent
 - Rounding and estimating
- Real Numbers
 - Adding, subtracting, multiplying and dividing real numbers
 - Exponents
 - Order of operations
- Basic Algebra
 - Simplifying algebraic expressions
 - Using substitution to evaluate algebraic expressions and formulas
- Equations and Inequalities
 - Solving equations involving the basic operations $(+, -, \times \text{ and } \div)$
 - Solving equations with fractions
 - Rearranging formulas
 - Solving inequalities
- Solving Applied Problems
 - Translating English phrases into algebraic expressions
 - Using equations to solve word problems
 - Solving word problems involving money and percentages
 - Using inequalities to solve word problems
- Exponents and Polynomials
 - The exponent rules
 - Negative exponents
 - Adding and subtracting polynomials
 - Multiplying polynomials
 - Dividing polynomials
- Factoring
 - Common factoring
 - Factor by grouping
 - Factoring trinomials
 - Solving quadratic equations by factoring

- Rational Expressions
 - Simplifying rational expressions
 - Multiplying and dividing rational expressions
 - Adding and subtracting rational expressions
 - Solving equations with rational expressions
 - Applied problems resulting in an equation with rational expressions
- Linear Equations
 - Graphing straight lines
 - Intercepts
 - Slope and its properties
 - Slope-Intercept form of a linear equation
 - Finding the equation of a line given the slope and a point
 - Finding the equation of a line given two points on the line
- > Other Graphs
 - Inequalities
 - Non-linear graphs
- Relations and Functions
 - Independent and dependent variables
 - Domain and range
 - Functional notation
- Solving Systems of Equations
 - Graphing method
 - Substitution method
 - Addition method
 - Applied problems resulting in a system of equations including breakeven analysis
- Quadratic Equations
 - Working with square roots
 - Solving quadratic equations by factoring
 - Solving quadratic equation using the quadratic formula
 - Applied problems resulting in a quadratic equation