

# GED<sup>®</sup> Test: Mathematical Reasoning Performance Level Descriptors What Your Score Means: Level 3 — GED<sup>®</sup> College Ready

Test-takers who score at this level typically have a **strong** proficiency in demonstrating skills in the following categories: number sense and computation, geometric measurement, data analysis and statistics, and algebraic expressions and functions.

Test-takers are generally able to demonstrate knowledge of and ability with the skills identified in the Below Passing level and the Pass/High School Equivalency level, as well as the following skills:

## Quantitative Problem Solving with Rational Numbers

- Simplify numerical expressions with rational exponents at a strong level
- Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, at a strong level
- Compute numerical expressions with squares and square roots of positive, rational numbers at a strong level
- Determine when a numerical expression is undefined at a strong level
- Solve arithmetic and real-world problems involving ratios and proportions at a strong level

## Quantitative Problem Solving in Measurement

- Use the Pythagorean theorem to determine unknown side lengths in a right triangle at a strong level
- Compute volume and surface area of cylinders at a strong level
- Determine radius, diameter, and height of cylinders, when given volume or surface area, at a strong level
- Compute volume and surface area of composite figures at a strong level
- Use counting techniques to solve problems and determine combinations and permutations at a strong level
- Determine the probability of simple and compound events at a strong level

## Algebraic Problem Solving with Expressions and Equations

- Compute with polynomials at a strong level
- Factor polynomial expressions at a strong level
- Compute with rational expressions
- Solve linear inequalities in one variable at a strong level

- Solve real-world problems involving inequalities at a strong level
- Write linear inequalities to represent context at a strong level
- Solve quadratic equations in one variable at a strong level

### **Algebraic Problem Solving with Graphs and Functions**

- Determine the slope of a line from a graph, equation, or table at a strong level
- Graph two-variable linear equations at a strong level
- Write the equation of a line with a given slope through a given point at a strong level
- Use slope to identify parallel and perpendicular lines and to solve geometric problems at a strong level
- Compare two different linear or quadratic functions, each represented in different ways, at a strong level

In order to progress to **GED® College Ready + Credit** level, test-takers need to continue to **strengthen** the skills listed in the GED® College Ready level, including:

- Compute volume and surface area of composite figures
- Use counting techniques to solve problems and determine combinations and permutations
- Write linear inequalities to represent context
- Solve quadratic equations in one variable
- Graph two-variable linear equations
- Use slope to identify parallel and perpendicular lines and to solve geometric problems
- Compare two different linear or quadratic functions, each represented in different ways