

# MATHEMATICS

## Algebra and Functions

Grade 6		
<p><b>1. Students write verbal expressions and sentences as algebraic expressions and equations; they evaluate algebraic expressions, solve simple linear equations and graph and interpret their results.</b></p> <p>6.1.1 Write and solve one-step linear equations in one variable</p> <p>6.1.2 Write and evaluate an algebraic expression for a given situation using up to three variables</p> <p>6.1.3 Apply algebraic order of operations and the commutative, associative and distributive properties to evaluate expressions and justify each step in the process</p> <p>6.1.4 Solve problems using correct order of operations manually and by using a scientific calculator</p>	<p><b>2. Students analyze and use tables, graphs and rules to solve problems involving rates and proportions.</b></p> <p>6.2.1 Convert from one unit of measurement to another (e.g., from feet to miles, from centimeters to inches)</p> <p>6.2.2 Demonstrate understanding that rate is a measure of one quantity per unit value of another quantity</p> <p>6.2.3 Solve problems involving rates, average speed, distance and time</p>	<p><b>3. Students investigate geometric patterns and describe them algebraically.</b></p> <p>6.3.1 Use variables in expressions describing geometric quantities (e.g., <math>P = 2w + 2l</math>, <math>A = 1/2 bh</math>, <math>C = \pi d</math>), which give the perimeter of a rectangle, area of a triangle, and circumference of a circle, respectively</p> <p>6.3.2 Express simple relationships arising from geometry in symbolic form</p>