

# **Duke University Talent Identification Program**

## **Learn on Your Own Algebra I**

### **Syllabus**

Chapter 1: Connections to Algebra

Chapter 2: Rules of Algebra

Chapter 3: Solving Linear Equations

Chapter 4: Graphing Linear Equations

Chapter 5: Writing Linear Equations

Chapter 6: Solving and Graphing Linear Inequalities

Chapter 7: Solving Systems of Linear Equations

Chapter 8: Powers and Exponents

Chapter 9: Quadratic Equations

Chapter 10: Polynomials and Factoring

Chapter 11: Using Proportions and Rational Equations

Chapter 12: Functions

Chapter 13: Radicals and More Connections to Geometry

Final chapter: Real World Applications