

# Midtown Summer Program

## 9th Grade Math Curriculum

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### General Information

#### Daily schedule

- 10 minutes of warm up problems
- 20 minutes of lecture
- 25 minutes of group work

#### Classroom expectations

- Listen when others speak
  - Ask questions when they arise
  - Respect and encourage your classmates
  - Welcome new problem solving approaches
  - Defend your solutions with words and pictures and examples
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### Syllabus

#### Week 1

- One and multi-step equations
- Variable expressions (linear)
- Graphing a line in slope-intercept form
- Identifying the slope

#### Week 2

- Variable expressions (linear and absolute value)
- Graphing a line in slope-intercept form
- Identifying the slope

- Absolute value equalities and inequalities
- Plotting a system of equations on the same graph
- Solving a system of equations

### **Week 3**

- Variable expressions (absolute value and polynomial)
- Plotting a system of linear equations on the same graph
- Solving a system of linear equations
- Graphing simple polynomials
- Identifying zeroes in polynomials
- Factoring polynomials

### **Week 4**

- Solving a system of linear equations
- Consider graphing as functions
- Variable expressions (polynomial)
- Identifying zeroes in polynomials
- Factoring polynomials

### **Week 5**

- Solving a system of linear equations
- Consider graphing as functions
- Variable expressions (polynomial)
- Identifying zeroes in polynomials
- Factoring polynomials

### **Week 6**

- Identifying zeroes in polynomials
- Factoring polynomials
- Completing the square
- Generalized functional operations