



## Intro to Algebra 7-9 Syllabus

### Course Goals

#### 1 Develop New Skills

Students develop their mathematical knowledge and abilities as they learn and practice new skills from their upcoming school year math course.

#### 2 Review Prior Skills

Students review and practice topics from their previous school year math course, and use them as a foundation for the new skills that they will acquire.

#### 3 Build Confidence

Students gain confidence in their mathematical abilities through practice and supportive feedback.

#### 4 Make Connections

Students make connections between different mathematical topics, and between math and everyday situations that connect to the math they learn.

### Course Topics

#### 1 Evaluating Algebraic Expressions

#### 2 The Language of Algebra

#### 3 Solving Equations

#### 4 Solving Systems of Equations

#### 5 Relations and Functions

#### 6 Slope of Linear Equations

#### 7 Graphing Linear Equations

#### 8 Writing Linear Equations

#### 9 Simplifying Exponents

## 10 Operations on Polynomials

## 11 Factoring Polynomials

## 12 Solving Quadratic Equations

# Course Schedule

### Day 1

#### Diagnostic Test

Students take a diagnostic test to determine their existing proficiency level in each of the units addressed by the course.

#### Course Introduction & Icebreakers

Students get to know their instructor and classmates, and learn about what the two weeks of the course will include.

#### First Day Activity

Instructors will need to choose from 3 options for what to do with the leftover time on the first day of class.

### Day 2

#### Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

#### Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

#### Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

#### Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

### Day 3

#### Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

#### Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

#### Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

#### Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## Day 4

### Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

### Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

### Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

### Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## Day 5

### Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

### Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

### Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

### Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## Day 6

### Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

### Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

### Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

### Daily Wrap-Up

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## Day 7

### Daily Warmup

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

### Daily Instruction and Practice

Students work through one or more of the course topics as determined by their individual needs.

### Daily Enrichment

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working

on.

### **Daily Wrap-Up**

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## **Day 8**

### **Daily Warmup**

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

### **Daily Instruction and Practice**

Students work through one or more of the course topics as determined by their individual needs.

### **Daily Enrichment**

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

### **Daily Wrap-Up**

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## **Day 9**

### **Daily Warmup**

Students check their understanding on concepts from yesterday's class with a quick set up warmup exercises.

### **Daily Instruction and Practice**

Students work through one or more of the course topics as determined by their individual needs.

### **Daily Enrichment**

Students participate in a class-wide activity, experiment, challenge, or game designed to reinforce concepts they've been working on.

### **Daily Wrap-Up**

Students reflect on the progress they made in class today, and record their thoughts in a math journal

## **Day 10**

### **Post-Test Review Activity**

Students play a review game to help them prepare for the course post-test.

### **Post-Test**

Students take a post-test to demonstrate their proficiency level in each of the units they worked on during the course.

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