

## 7th Grade Accelerated Curriculum

All of the 7th grade standards are covered in this course. Additionally, most of the 8th grade standards are covered.

***Overview of 8th grade standards. These are the topics not covered in 7th grade common core.***

- [8th Grade Standards Unpacked](#)

### Unit 1: Number Sense and Exponents

- [Number Sense and Exponents Overview](#)
- [Engage New York Curriculum: Module 1](#)
- [Engage New York Curriculum: Module 7](#)

### Teaching Videos

- [Square roots of perfect squares](#)
- [Taking the square root of a square](#)
- [Finding cubic roots](#)
- [Apply exponents to negative bases](#)
- [multiply two or more exponential expressions](#)
- [divide exponential expressions by noticing patterns](#)
- [raise an exponential expression to a power](#)
- [apply negative exponent rules](#)
- [apply zero exponent rules](#)
- [Comparing numbers using scientific notation](#)
- [Writing Large Numbers in Scientific Notation](#)
- [Writing Small Numbers in Scientific Notation](#)
- [Writing Small Numbers in Scientific Notation](#)
- [Multiply Numbers in Scientific Notation](#)
- [Divide Numbers in Scientific Notation](#)
- [Proof of Pythagorean Theorem](#)
- [Finding the measure of the unknown side](#)
- [Use Pythagorean Theorem to check for a right triangle](#)
- [Interactive Computer- Simulated Pythagorean Theorem Proof](#)

## Unit 2: Expressions and Equations

- [Analyzing Functions and Equations Overview](#)
- [Engage New York Curriculum: Module 4](#)

### Teaching Videos

- [Combining like terms and using the distributive property](#)
- [Predict the number of solutions an equation may have](#)
- [finding slope of a line with a graph](#)
- [finding slope from two points](#)
- [Identify parts of linear model](#)
- [finding the slope and y-intercept](#)
- [how to solve for y then graph](#)
- [virtual slope](#)
- [system of equations by substitution](#)
- [Parallel and Perpendicular Lines in the world](#)
- [Parallel and Perpendicular Lines](#)
- [Parallel and Perpendicular Lines](#)
- [parallel and perpendicular lines](#)
- [Slope Dude Memory Trick](#)
- [Slope and word problems](#)
- [solving real world problems with  \$y=mx+b\$](#)
- [finding slope of a line with a graph](#)
- [Pos.,Neg.,Zero,Undefined Slopes](#)
- [finding slope from two points](#)
- [Identify parts of linear model](#)
- [finding the slope and y-intercept](#)
- [how to solve for y then graph](#)
- [writing equation in slope intercept form from two points](#)
- [Parallel and Perpendicular Lines in the world](#)
- [Parallel and Perpendicular Lines](#)
- [Parallel and Perpendicular Lines](#)
- [parallel and perpendicular lines](#)
- [Slope Dude Memory Trick](#)
- [Slope and word problems](#)
- [solving real world problems with  \$y=mx+b\$](#)

## Unit 3: Geometry

- [Geometry Overview](#)
- [Engage New York Curriculum: Module 2](#)
- [Engage New York Curriculum: Module 3](#)
- [Engage New York Curriculum: Module 7 \(only topic C\)](#)

### Teaching Videos

- [LearnZillion-Congruent Figures](#)
- [Proof of Pythagorean Theorem](#)
- [Finding the measure of the unknown side](#)

## Unit 4: Volume of Solids and Figures

- [Volume of Solids and Figures Overview](#)
- [Engage New York Curriculum: Module 5 \(only topic B\)](#)

### Teaching Videos

- [Volume of a cylinder](#)
- [Volume of cone](#)
- [Volume of a Sphere](#)