**9-Math - Essentials**

**Unit 1 Circle Geometry**

[Vocabulary (chord, tangent, radius, diameter)](https://www.youtube.com/watch?v=W38HoD6hvXA)

Use Pythagorean theorem in a circle [Video 1](https://www.youtube.com/watch?v=uaj0XcLtN5c) [Video 2](https://www.youtube.com/watch?v=xtMAIom7js8)

Tangents  
Instruction & Examples: p.385 - 386  
Practice: p.388-389 #3 – 8

Chords  
Instruction & Examples: p.393 – 394  
Practice: p.397 – 398 #3 – 11

**Unit 2 Number Sense**

[Ordering & Comparing/Number Lines](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-negative-number-topic/cc-6th-comparing-negative-numbers/v/ordering-rational-numbers)

**Unit 3 Number Sense II**

Operations on Rational Numbers

**Unit 4 Powers & Exponents**

[Understanding Powers (repeating multiplication, base, exponent)](https://www.youtube.com/watch?v=HKWxigjAbp4)

**Unit 5 Polynomials**

Like terms

Add/Subtract

Multiply/Divide

**Unit 6 Equations**

Solve 2 step equations

Solve equations with variables on both sides

**Unit 7 Graphing Equations**

Graph linear equations

**Unit 8 Surface Area**

Rectangular prisms

Triangular prisms

Cylinders