

## What's on the Final?

- ❖ Chapter 1 Sections 3 – 6
  - Geometry Basics
    - Points, Lines, and Planes
    - Segments, Rays, Parallel Lines and Planes
    - Measuring Segments and Segment Addition
    - Angles and Angle Addition
  
- ❖ Chapter 2 Sections 1 – 5
  - Reasoning and Proof
    - Conditionals, Biconditionals
    - Converse, Inverse, and Contrapositive (Chapter 5 Section 4)
    - Proofs in Algebra
    - Proving Angles Congruent
  
- ❖ Chapter 3 Sections 1 – 5
  - Parallel and Perpendicular Lines
    - Properties of Parallel Lines
    - Proving Lines Parallel
    - Triangle Angle-Sum Theorem
    - Polygon Angle-Sum Theorem
  
- ❖ Chapter 4 Sections 1 – 7
  - Congruent Triangles
    - Congruent Figures
    - Proving Triangles Congruent: SSS, SAS, ASA, AAS, and HL
    - Using Congruent Triangles: CPCTC
    - Isosceles and Equilateral Triangles
  
- ❖ Chapter 5 Sections 1 – 3, and 5
  - Relationships Within Triangles
    - Midsegments of Triangles
    - Bisectors in Triangles
    - Concurrent Lines, Medians, and Altitudes
    - Inequalities in Triangles
  
- ❖ Chapter 6 Sections 1 – 5
  - Quadrilaterals
    - Classifying Quadrilaterals: Parallelogram, Rhombus, Rectangle, Square, Kite, Trapezoid and Isosceles Trapezoid
    - Properties of Parallelograms
    - Proving a Quadrilateral is a Parallelogram

- ❖ Chapter 7 Sections 1 – 5
  - Similarity
    - Ratios and Proportions
    - Similar Polygons (specifically triangles)
    - Similarity in Right Triangles: Geometric Mean
    - Proportions in Triangles
  
- ❖ Chapter 8 Sections 1 – 8
  - Right Triangles and Trigonometry
    - Pythagorean Theorem and Its Converse
    - Special Right Triangles: 45 – 45 – 90 and 30 – 60 – 90
    - Sine, Cosine, and Tangent Ratios
    - Angles of Elevation and Depression
  
- ❖ Chapter 10 Sections 1 – 7
  - Area
    - Areas of Parallelograms and Triangles
    - Areas of Trapezoids, Rhombuses, and Kites
    - Areas of Regular Polygons
    - Perimeters and Areas of Similar Figures
    - Trigonometry and Area
    - Circles and Arcs
    - Areas of Circles and Sectors
  
- ❖ Chapter 11 Sections 2 – 7
  - Surface Area and Volume
    - Surface Areas of Prisms and Cylinders
    - Surface Areas of Pyramids and Cones
    - Volumes of Prisms and Cylinders
    - Volumes of Pyramids and Cones
    - Surface Areas and Volumes of Spheres
    - Areas and Volumes of Similar Solids
  
- ❖ Chapter 12 Sections 1 – 4
  - Circles
    - Tangent Lines
    - Chords and Arcs
    - Inscribed Angles
    - Angle Measures and Segment Lengths