

Logical Reasoning

- **Inductive** and **deductive** reasoning
- Use them to make an argument and understand the difference between them
- Analyzing the strength of arguments
- Counter example and how to use
- Creating a proof using the **2-column method**

Measurement

- Calculate measurements of unique shapes (perimeter, area, volume)
- Remember the families of shapes (prisms, pyramids, and sphere)

- Convert between different areas and Volumes (not between systems so not in-cm but in-ft or in²-ft²)

- Scale Diagrams (create, use, and read)

Systems of Linear Inequalities

Understand what a system of linear inequalities

-- how it is different from just one linear equation, or linear equalities, non-linear systems

Create a system of linear inequalities that represent a scenario (restrictions) – **how to use the TI-83 to graph shaded regions**

Create your own situation that can be represented by a system

Solution set – what does it mean to solve system and testing it (visually with the graph as well as with the inequalities)

Domain / range

Optimization – solutions that optimize a goal