

Unit 3: Logic and Reasoning	~October 2-October 12	
Standards: G.1 The student will use deductive reasoning to construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include a) identifying the converse, inverse, and contrapositive of a conditional statement; b) translating a short verbal argument into symbolic form; and c) determining the validity of a logical argument.		
Topic	I can...	Resources
Conditional and Biconditional Statements	<ul style="list-style-type: none"> ✓ identify the converse, inverse, and contrapositive of a conditional statement. ✓ write a biconditional statement. 	Conditional Statements (Khan Academy) https://www.khanacademy.org/test-prep/lsat/lsat-lessons/logic-toolbox-new/a/logic-toolbox--article--conditional-reasoning-logical-equivalence
Symbolic Notation and Laws of Logic	<ul style="list-style-type: none"> ✓ use Venn diagrams to represent set relationships. ✓ translate a short verbal argument into symbolic form. ✓ use deductive reasoning to make a valid or true conclusion. ✓ use a counterexample to disprove a statement. 	Video Resources from OPHS https://www.youtube.com/watch?v=O6zsHWP5cDw https://www.youtube.com/watch?v=6FG89OFXrss https://www.youtube.com/watch?v=zwhhDUNm14 Other Youtube Videos that might be helpful https://www.youtube.com/watch?v=4yfDM5zV6H4 https://www.youtube.com/watch?v=0ISdS6RUpVM https://www.youtube.com/watch?v=qrFFsZw0JWc
Proofs with algebra, line segments and angle relationships	<ul style="list-style-type: none"> ✓ use properties of algebra in a proof ✓ use properties of line segments and angle relationships in proofs 	Sample Assessment/Review with Solutions Sample Assessment Reasoning and Proof 19-20.pdf Unit 3 Sample Assessment Solutions.pdf