

**Geometry**  
**Unit 11- Objectives**

**Ketner**

**Objective I - Making arguments using the laws of Logic**

- a. Law of Detachment
- b. Law of Transitivity
- c. Law of Contrapositive
- d. Law of Indirect Reasoning
  - 1. Construct a proof by contradiction
  - 2. Use Counterexamples to disprove a statement

**Objective II - Finding the Converse, Inverse, and Contrapositive of Logical statements**

- a. Show that the Contrapositive is logically equivalent to the original
- b. Show that the Converse and Inverse are not logically equivalent to the original

**Objective III - Using coordinate geometry to do proofs involving quadrilaterals**

**Objective IV - Using the Distance Formula and Midpoint Formulas to determine lengths**

**Objective V - Distributed Practice**

Assign. #	Section	Objective	Page and Problem #	# of Probs.	Due Date
1	11-1	Obj. I: Arguments w/ Laws of Logic  DP: Ch. 10	Pg. 625 #4-6 Pg. 626 #9-13,15-18, 20 Pg. 616 #1-5	3 10 5	
2	11-2	Obj. II: Contrapositive Obj. I: Arguments DP: Ch. 10	Pg. 631 #1-11 Pg. 632 #16-20 Pg. 616 #6-8	11 5 3	
3	11-4	Obj. I: Indirect Reasoning DP: Obj. II-Contrapositive DP: Ch 10	Pg. 643 #1-4, 6-12 Pg. 644 #17-19 Pg. 616 #17-19	11 3 3	
4	11-6	Obj. V: Distance Formula Obj. IV: Proofs DP: Obj. I-Arguments DP: Obj. II-Negations	Pg. 654 #1-3, 6-8, 11 Pg. 654 #9, 10 Pg. 655 #16-18 Pg. 680 #23, 24	7 2 3 2	
5	11-8	Obj. V: Midpoint  Obj. IV: Proofs DP: Obj. V-Distance	Pg. 655 #1-3, 8, 9, 12-14, 20 Pg. 666 #15, 18, 19, 24 Pg. 660 #16 Pg. 679 #1	9  3 2	