

Geometry Study Guide Chapter 2 Reasoning and Proof

2-1 Patterns & Inductive Reasoning

1. What is inductive reasoning? A conjecture? A counterexample?
2. Do you understand Problems 1, 2, 4, and 5?
3. Do you understand how to do these problems? p. 85; #8, 14, 23, 24, 28, 32, 36

2-2 Conditional Statements

1. Can you describe how conditionals, hypotheses, and conclusions relate?
2. Do you understand conditionals, converses, inverses, and contrapositives? How are the truth values related?
3. Do you understand Problems 1, 2, 3, & 4?
4. Do you understand how to do these problems? p. 93; #5, 12, 13, 17, 20, 22

The first test covers this material.

2-3 Biconditionals and Definitions

1. Can you describe a biconditional? What is required to create one? How does a biconditional relate to a good definition?
2. Do you understand Problems 1, 2, 3, & 4?
3. Do you understand how to do these problems? p. 101; #7, 9, 13, 20, 23, 26

2-4 Deductive Reasoning

1. What is deductive reasoning? Can you describe the Law of Detachment? Can you describe it using the letters p and q? Can you describe the Law of Syllogism? Can you describe it using the letters p, q, and r?
2. Do you understand Problems 1, 2, & 3?
3. Do you understand how to do these problems? p. 110; #6, 7, 10, 11-13, 15, 16

2-5 Reasoning in Algebra & Geometry

1. Can you describe the reflexive, symmetric, and transitive properties? Can you create examples?
2. Do you understand how to create a two-column proof?
3. Can you recognize the use of addition/subtraction/multiplication/division properties of equality?
4. Do you understand Problems 1, 2, & 3?
5. Do you understand how to do these problems? p. 117; #6-19

The second test covers the entire chapter.

2-6 Proving Angles Congruent

1. What is a theorem? How does it differ from a postulate?
2. Do you understand Problems 1 & 2?
3. Review the various theorems described in this section.
4. Do you understand how to do these problems? p. 124; #6, 7, 9, 10, 12

REVIEW: Chapter Review p. 129-132; Vocabulary; Notes; Homework; Classwork; Quizzes