Geometry Unit: Introduction to Proofs Section: Reasoning in Geometry

Review Worksheet

- 1. Define the following and give an example:
- a. Inductive Reasoning:
- b. Conjecture:
- c. Deductive Reasoning:
- d. Conditional Statement:
- e. The Law of Detachment
- f. The Law of Syllogism

2. State a conjecture based on the following statements. What type of reasoning are you using? Write a counterexample to this conjecture.

- Jane is a girl that likes chocolate.
- Amy is a girl that likes chocolate.
- Laura is a girl that likes chocolate.
- Tammy is a girl that likes chocolate.

- 3. Name the following using the conditional statement given:
 - If I study hard, then I will get good grades.

a. Hypothesis:

b. Conclusion:

c. Converse:

d. Inverse:

e. Contrapositive