

Name: \_\_\_\_\_

Date Started: \_\_\_\_\_ Date Finished: \_\_\_\_\_ Score: \_\_\_\_\_

**Learning Activity Sheet**  
**Deductive and Inductive Reasoning**

A. Complete each syllogism. Write a general statement (x), a particular statement (y), and a conclusion (z).

1. x: If you are a good citizen, then you obey traffic rules.  
y: Aaron is a good citizen.  
z: \_\_\_\_\_

2. x: \_\_\_\_\_  
y: Amy and Andy are diligent students.  
z: Amy and Andy do their homework.

B. Determine if a valid conclusion can be reached from the two true statements.

- x : If two lines intersect to form a right angle, then they are perpendicular.  
y : Lines m and n are perpendicular.

Answer: \_\_\_\_\_

C. Create a second statement and a valid conclusion from the given true statement.

- a. If two angles are congruent, then their measures are equal.  
b. If two intersecting lines form a right angle, then they are perpendicular.

Answer: \_\_\_\_\_

D. Use inductive reasoning to find the next two terms of each sequence. Describe how you found the terms.

a. 1, 1, 2, 3, 5, ... \_\_\_\_\_

b. 1, 11, 22, 34, 47, ... \_\_\_\_\_