In-Class (Individual!) Activity #4
(10 points)

Name #1: ___________________________  Section Leader: ______________

Directions: Working alone, without notes or a phone/tablet/computer, answer the following questions to the best of your individual ability. We encourage you to show your work, to help us understand your thought process. After 10 minutes, we’ll let you self-check your answers using your notes or an electronic device; heck, we’ll even give you help if you’d like some! When you are done, you may leave; please hand this page to one of the class staff on your way out.

1. Inheritance.
   (a) Is inheritance described as a “has a”, “is a”, or a “can has a” relationship?
   (b) When a method of a subclass overrides a method of its superclass, the method signatures must match. List the three parts of a method signature.
   (c) When a subclass inherits from an abstract superclass, the subclass acquires a benefit and an obligation. What is the benefit, and what is the obligation?

2. Define: Encapsulation.

3. Java interfaces supply little more than a list of method headers. Why, then, would a programmer want to implement an interface?