

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

Section: \_\_\_\_\_

Quiz #6

1. (3 pts) Where does it make sense to use the Java keyword “this”? (Circle all that apply.)  
**constructors**            **instance methods**            **static methods**
2. (2 pts) What visibility specifier do we write in front of a member of a class to ensure that the member is visible everywhere in the project?
3. (2 pts) What visibility specifier do we write in front of a member of a class to ensure that the member is visible only in the class containing it?
4. (3 pts) Consider the class below. Fill in the constructor so that it assigns the value of the parameter to the instance variable. (Note that they are intentionally named the same thing.)

```
public class Plate {  
    private int size;  
    public Plate(int size) {  
  
  
    }  
}
```

5. (5 pts) Write a copy constructor for the Plate class. Your copy constructor must make a call to the constructor you wrote in the previous question.

6. (6 pts) Consider the unusual method below:

```
public static boolean blah(double x) {  
    return x == (3 + x - 3);  
}
```

- a. What will the return value be? (Circle one.)

**always true**      **always false**      **sometimes true and sometimes false**

- b. Why?

7. (3 pts) What does the acronym API stand for?

8. (6 pts) Assume there is a class called Numbers that contains a method with the following prototype:

```
public static int square(int x)
```

The method will return the square of the value x.

Write a JUnit test that passes the argument 7 to this method. Your test should pass if the return value is 49 and fail otherwise. Hint: Be sure to include the annotation that belongs above your method.