

CSSE 220 – Object-Oriented Software Development
Rose-Hulman Institute of Technology

Worksheet 05

Name (Print): _____ Section: _____

1. 1) Variables of primitive type store _____
2) Variables of class type store _____
2. Draw below 2 boxes for:
int x = 10; int y = 20;
3. Draw a diagram for a class instance:
Rectangle box = new Rectangle(x, y, 5, 5);
4. 1) When a primitive variable is assigned to another, it creates a copy of _____
2) Modifications to one variable _____ the other variable
5. What is the value of y:
Answer: _____

1 int x = 5;
2 int y = x;
3 int z = y;
4 x = 15; z = 20;
6. 1) When an object is assigned to another, it creates a copy of _____
2) Modifications to one variable _____ the other variable
7. Draw boxes for:
int x = 10;
int y = x;
y = 20;
8. 1) _____ equality compares the memory addresses
2) _____ equality compares the values of the objects

9. True/False Strings are mutable (=can be modified once created)
10. _____ - Object-oriented design principles, using UML for modeling, applying design patterns, refactoring code, and implementing testing strategies
11. Define UML:

12. Complete this UML diagram by adding a public method getDescription() that returns a string

```
1 -----  
2 |       Car      |  
3 -----  
4 | - make: String |  
5 | - model: String |  
6 | - year: int    |  
7 -----  
8 | + Car(make, model, year)|  
9 |  
10-----
```

13. Complete Design Principle 1:
Make sure your design allows proper functionality

- (a)
- (b)
- (c)

14. Complete Design Principle 2:
Structure design around the data to be stored

- (a)
- (b)

15. **Before You Leave**

Write one question you still have about classes, objects, or constructors.