

Name _____ Period _____

Skill 20.1 Exercise 1

(a) What does it mean to overload a method or constructor?

(b) What is the purpose of overloading in Java?

(c) Does the class shown to the right illustrate overloading? Explain.

```
public MyClass{
    String a;

    MyClass(int a){
        this.a = String.valueOf(a);
    }
    MyClass(double a){
        this.a = String.valueOf(a);
    }
    MyClass(boolean a){
        this.a = String.valueOf(a);
    }
}
```

Skill 20.2 Exercise 1

```
class MyClass {
    int height;
    MyClass() {
        System.out.println("bricks");
        height = 0;
    }
    MyClass(int i) {
        System.out.println("Building a new House that is " + i + " feet tall");
        height = i;
    }
}
```

Refer to the MyClass class above. What is printed when the following code is executed from the main method of the driver class?

(a) MyClass t = new MyClass(0);

(b) new MyClass();

Name _____ Period _____

Skill 20.02 Exercise 2

Consider the following class definition. Each object of the class `Item` will store the item's name as `itemName`, the item's regular price, in dollars, as `regPrice`, and the discount that is applied to the regular price when the item is on sale as `discountPercent`. For example, a discount of 15% is stored in `discountPercent` as 0.15.

```
public class Item
{
    private String itemName;
    private double regPrice;
    private double discountPercent;
    public Item (String name, double price, double discount)
    {
        itemName = name;
        regPrice = price;
        discountPercent = discount;
    }
    public Item (String name, double price)
    {
        itemName = name;
        regPrice = price;
        discountPercent = 0.25;
    }
    /* Other methods not shown */
}
```

Which of the following code segments, found in a class other than `Item`, can be used to create an item with a regular price of \$10 and a discount of 25% ?

- I. `Item b = new Item("blanket", 10.0, 0.25);`
- II. `Item b = new Item("blanket", 10.0);`
- III. `Item b = new Item("blanket", 0.25, 10.0);`

Skill 20.3: Exercise 1

(a) Does the class shown to the right illustrate overloading? Explain.

```
public MyClass{
    String a;

    MyClass(int a){
        this.a = String.valueOf(a);
    }
    int doSomething(int i){
        return i;
    }
    String doSomething(int i){
        return a;
    }
}
```