Worksheet W.A.6.1 Name_____

INTRODUCTION TO CLASSES

1. Find the exact output for the code below. Note that the main method begins in the PizzaTester class on the third page of this code. This program will be enhanced in subsequent lessons. The output begins as follows with input from the keyboard shown in italics:

```
Please enter your first name: Sam
```

```
import chn.util.*;

class PizzaParlor
{ // instance variables
  private String myName;
  private int myNumCheesePizzas; //# of cheese pizzas
  private int myNumPeppPizzas; // # of pepperonini pizzas
  private int myNumVegPizzas; //# of veggie pizzas
  private int myCheeseSupply; // ounces of cheese
  private int myPepperoniSupply;// ounces of pepperoni
  private int myVeggieSupply; // ounces of veggies
  private double myRevenue; // dollars collected
  private double myOrigAcctBal;//original bank account balance

  // constructor
  PizzaParlor(String name)
  {
    myName = name;
    myNumCheesePizzas = 0;
    myNumPeppPizzas = 0;
    myNumVegPizzas = 0;
    myCheeseSupply = 400;
    myPepperoniSupply = 200;
    myVeggieSupply = 200;
    myRevenue = 0;
    myOrigAcctBal = 1000;
  }

  // methods
  void orderCheese()
  {
    myNumCheesePizzas++;
    myRevenue += 8;// cheese pizza price:$8
    myCheeseSupply -= 12;//cheese needed per cheese pizza
  }

  void orderPepperoni()
  {
    myNumPeppPizzas++;
    myRevenue += 10;//pepperoni pizza price:$10
    myCheeseSupply -= 8;//cheese needed per pepp pizza
    myPepperoniSupply -= 6;//pepperoni needed per pepp pizza
  }
```



```
  void orderVeggie()
  {
    myNumVegPizzas++;
    myRevenue += 11;//veggie pizza price:$11
    myCheeseSupply -= 8;//cheese needed per veggie pizza
    myVeggieSupply -= 12;//veggies needed per veggie pizza
  }

  String getName()
  {
    return myName;
  }

  int getNumCheesePizzas()
  {
    return myNumCheesePizzas;
  }

  int getNumPepperoniPizzas()
  {
    return myNumPeppPizzas;
  }

  int getNumVeggiePizzas()
  {
    return myNumVegPizzas;
  }

  int getCheeseSupply()
  {
    return myCheeseSupply;
  }

  int getPepperoniSupply()
  {
    return myPepperoniSupply;
  }

  int getVeggieSupply()
  {
    return myVeggieSupply;
  }

  double getRevenueTotal()
  {
    return myRevenue;
  }

  double getBankAccountBalance()
  {
    return myOrigAcctBal + myRevenue;
  }
}
```



```
//-------------------- End of PizzaParlor class --------------------//


public class PizzaTester
{
  public static void main(String[] args)
  {
    ConsoleIO keyboard = new ConsoleIO();
    String name;

    System.out.print("Please enter your first name: ");
    name = keyboard.readToken();

    PizzaParlor diner = new PizzaParlor(name);

    System.out.print("The name of your restaurant is: ");
    System.out.println(diner.getName() + "'s Pizza Parlor");

    diner.orderCheese();
    diner.orderCheese();
    diner.orderPepperoni();
    diner.orderCheese();
    diner.orderPepperoni();
    diner.orderVeggie();
    diner.orderCheese();
    diner.orderVeggie();
    diner.orderPepperoni();
    diner.orderCheese();

    System.out.println("# of Cheese ordered is "
      + diner.getNumCheesePizzas());
    System.out.println("# of Pepperoni ordered is "
      + diner.getNumPepperoniPizzas());
    System.out.println("# of Veggie ordered is "
      + diner.getNumVeggiePizzas());

    System.out.print("\nRemaining supply of cheese in ounces is: ");
    System.out.println(diner.getCheeseSupply());
    System.out.print("Remaining supply of pepperoni in ounces is: ");
    System.out.println(diner.getPepperoniSupply());
    System.out.print("Remaining supply of veggies in ounces is: ");
    System.out.println(diner.getVeggieSupply());

    System.out.println("\nRevenue is $" + diner.getRevenueTotal());
    System.out.println("Bank balance is now $"
      + diner.getBankAccountBalance());
  }
}
```


2. Enhance this code to keep track of the pizza parlor's dough supply that is needed to make the pizzas. Add a private variable called myDoughSupply and initialize it to 400 ounces. Decrease this supply by 11 ounces for each pizza made. Then add a method called getDoughSupply() that will report the current supply of dough. You'll also have to revise the number of each type of pizza ordered. You may use arrows to demonstrate location and add your code directly to the version above. With these revisions, your output should look as follows:

```
Please enter your first name: Mary
The name of your restaurant is: Mary's Pizza Parlor
# of Cheese ordered is 3
# of Pepperoni ordered is 4
# of Veggie ordered is 3

Remaining supply of cheese in ounces is: 308
Remaining supply of pepperoni in ounces is: 176
Remaining supply of veggies in ounces is: 164
Remaining supply of dough in ounces is: 290

Revenue is $97.00
Bank balance is now $1097.00
```

