Name _____ Period ____

Numerical Operations

Your Tasks (Mark these off as you go)

- ☐ Create the NumericalOperations driver class
- ☐ Print the result of a numeric operation to the console
- ☐ Predict the result of a numeric operation
- ☐ Print the result of a numeric operation involving mixed data types to the console
- ☐ Print a number backwards
- ☐ Receive credit for the group portion of this lab

☐ Create the NumericalOperations driver class

Consider a class file called NumericalOperations.java. In the space below, write code that could be used to declare the class and the main method.

☐ Print the result of a numeric operation to the console

Write code to perform the following,

- Create three String variables and assign each of the equations shown below to a different variable.

  "Problem 1: 79 + 3 * (4 + 82 – 68) – 7 + 19 = "
  "Problem 2: (179 + 21 + 10)/7 + 181 = "
  "Problem 3: 10389 * 56 * 11 + 2246 = "

- Create three double variables. Assign the result of each of the equations shown above to a different variable.
- Concatenate the result of the numerical operation to the appropriate equation,
- Print each equation and the corresponding result to the console.

☐ Predict the result of a numeric operation

Refer to the following code,

```
int dividend = 12, divisor = 4, quotient = 0, remainder = 0;
int divident2 = 13, divisor2 = 3, quotient2 = 0, remainder2 = 0;
quotient = dividend / divisor;
remainder = dividend % divisor;
quotient2 = dividend2 / divisor2;
remainder2 = dividend2 % divisor2;
```

Predict the result for each of the following

`System.out.println(quotient);`	
`System.out.println(remainder);`	
`System.out.println(quotient2);`	
`System.out.println(remainder2);`	

☐ Predict the result of a numeric operation involving mixed data types

Consider the code below. Predict the result of each of the following numeric operations

```
double d1 = 37.9;
double d2 = 1004.128;
int i1 = 12;
int i2 = 18;
```

Problem	**Predicted answer**
57.2 * (i1 / i2) + 1	
57.2 * ((double)i1 / i2) + 1	
15 – i1 * (d1 * 3) + 4	
15 – i1 * ((int)d1 * 3) + 4	

☐ Print a number backwards

Write code that could be used to write a number backwards. Your code should work for any number with 4 digits. Consider the int data type below,

int number = 1234;

When your code is ran, “4321” should print to the console.

Below are more examples,

int data type	**result**
int n1 = 3455;	5543
int n2 = 8767;	7678
int n3 = 2468;	8642

☐ Receive Credit for this lab guide

Submit this portion of the lab to Pluska to receive credit for the lab guide. Once received, your completed code challenges will also be graded and will count towards your final lab grade.