

Write your name below and indicate your role,

Project Manager (PM), Recorder (R)

Name \_\_\_\_\_ Role \_\_\_\_\_

Name \_\_\_\_\_ Role \_\_\_\_\_

## 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 StringOperations driver class

Consider a class file called StringOperations.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 dividend2 = 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);	

## □ Print the result of a numeric operation involving mixed data types

Consider the code below,

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

Write code to perform the following,

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

"Problem 1:  $57.2 * ((\text{double})i1 / i2) + 1 =$  "

"Problem 2:  $15 - i1 * (\text{int})(d1 * 3) + 4 =$  "

"Problem 3:  $15 - i1 * ((\text{int})d1 * 3) + 4 =$  "

- 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.

### ❑ 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 the group portion of this lab



Before you submit your lab have Ms. Pluska check off the above tasks

Do not continue until you have Ms. Pluska's (or her designated TA's) signature \_\_\_\_\_