

Chapter 4 Worksheet 4 Nested if 's

page 1 of 2

Name _____

Pts: 20

class hour _____

I. After execution of the following code, what will be the value of x if the value for x is: a) 1 or b) 3 or c) 10? (1 point each blank)

1a) _____

1)

b) _____

```
int x = ...;
if (x > 5)
    x = x + 5;
else if (x > 2)
    x = x + 10;
```

c) _____

2)

2a) _____

```
int x = ...;
if (x > 5)
    x = x + 5;
if (x > 2)
    x = x + 10;
```

b) _____

c) _____

3)

3a) _____

```
int x = ...;
if (x > 5)
    x = x + 5;
else if (x > 2)
    x = x + 10;
else
    x = x + 15;
```

b) _____

c) _____

II. Consider the following **if** statement, which is syntactically correct but uses poor style and indentation:

```
if (x >= y) if (y > 0) x = x * y; else if (y < 4) x = x - y;
```

After execution of the statement, what value will x contain if (1 pt each)

1) x and y are **int** variables containing the initial values 10 and 2, respectively. 1) _____

2) x and y are **int** variables containing the initial values 2 and 10, respectively. 2) _____

3) x and y are **int** variables containing the initial values 10 and -2, respectively. 3) _____

III. Do **back** of paper!

OVER

III. Complete the program fragment below that assigns a day of the month followed by a temperature. It then outputs the day of the month followed by "cool" if the temperature is less than 75, "warm" for 75 up to 90, and "hot" for 90 and over.

```
final int COOL = 75;
final int WARM = 90;
int day = varies;
int temp = varies;
System.out.println(day + " ");

if (temp < _____ )
    System.out.println("cool");

_____
if (temp < WARM)
    System.out.println( _____ );
else
    System.out.println( _____ );
```

IV. Write a nested **if** statement that outputs a message saying whether the variable NUMBER is greater than, less than, or equal to the declared double data type constant of PI. You are to use *nested ifs* and use the word **if** only twice! (4 pts)
