Unit 3 – Worksheet 02 2-D Arrays Name: _____

#1-4 Consider the following 2-D Array:

```
int[ ][ ] woohoo = new int[2][3];
woohoo [1][2] = 7;
woohoo [0][1] = 2;
woohoo [1][1] = 5;
```

1. Find the output for: `System.out.print(woohoo[1][1]+woohoo[0][0]*woohoo[1][2]);`

2. Find the output for: `System.out.print(woohoo[1][1]+" "+woohoo[1][2]);`

3. Find the output for:

```
for(int i=0 ; i<woohoo.length ; i++)
    System.out.println(woohoo[0][i]);
```

4. Find the output for:

```
for(int i=0;i<woohoo.length;i++)
    for(int j=0;j<woohoo.length;j++)
        System.out.print(woohoo[i][j]+"  ");
```

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Consider the following Array:

```
int[ ][ ] thisArray =  {  {3, 8, 2},
                          {9, 4, 1},
                          {5, 7, 10},
                          {6, 0, 11}  };
```

Find the following outputs:

5. System.out.println(thisArray[0][0]+thisArray[1][2]);

6. System.out.println(thisArray[2][1]*thisArray[3][0]);

7. System.out.println(thisArray[3][3]+thisArray[2][2]);

8. System.out.println(thisArray[3][2]-thisArray[0][2]);

9. System.out.println(thisArray[2][2]/thisArray[2][0]);

10. System.out.println(thisArray[3][1]*thisArray[4][0]);

11. System.out.println(thisArray[0][1]%thisArray[1][1]);

12. Consider the following 2-D Array: int[ ][ ] myNumbers = new int[3][4];
Complete the code below (fill in the missing code) so that the desired array is stored into the myNumbers Array and then the array is printed (outputted).

**Desired Array**

```
{  {0,1,2,3},
   {0,2,4,6},
   {2,3,4,5}  };
```

```
int[ ][ ] myNumbers = new int[3][4];                    //1
for(int i=0;i<myNumbers.length;i++)                     //2
{                                                       //3
  if(          )                                        //4   * Code needed *
    for(int j=0;j<myNumbers[i].length;j++)              //5
                                                        //6   * Code needed *
  else if(i==1)                                         //7
                                                        //8   * Code needed *
                                                        //9   * Code needed *
  else                                                  //10
                                                        //11 * Code needed *
      myNumbers[i][j]=j+2;                              //12
}                                                       //13
for(int i=0;i<myNumbers.length;i++)                     //14
  for(int j=0;j<myNumbers[i].length;j++)                //15
  {                                                     //16
    System.out.print(myNumbers[i][j]+"  ");             //17
    if(j==                              )               //18 * Code needed *
      System.out.print("\n");                          //19
  }                                                     //20
```

13. **Review**: Create a new class called **whySoNegative**.

- Create a new integer Array called negativeArray that will hold five integers.
- Use a for-loop to collect five integers from the user that get stored into the negativeArray (instruct the user to enter negative numbers … you do not need to test to see if they are).
- Have your program turn all of the user's negative integers into positive values (you can do this inside the for-loop or outside the for-loop … it is much more efficient to do it in the loop though).
- Output a comment that asks the user why they are so negative and then neatly display their numbers as positive integers.

If done correctly, the following is an example of what the program might look like:

```
Welcome to the program that will make you positive!
I am going to have you enter five negative integers.
Enter negative integer #1:  -3
Enter negative integer #2:  -10
Enter negative integer #3:  -783
Enter negative integer #4:  -9
Enter negative integer #5:  -1000
Why are you so negative?  Here, let me help you:    3    10    783    9    1000
```