Final Exam Review #1 worksheet                    Name: _____

| | |
|---|---|
| 1. Write a line of code to store a random integer from 13 to 22 (inclusive) in the int variable x:<br><br>`int x =` | 2. What is output by the following?<br><br>`String str = "I'm a String BOSS!";`<br>`System.out.println(str.substring(7,10));` |
| 3. Write a **for loop** which prints out the numbers 4, 7, 10, 13, 16 | 4. Write a **while loop** that prints out the numbers 11, 7, 3, -1 |
| 5. Write code to check if the user-entered data stored in the variable **name** is equal to "solstice". Print "yes" if it is, nothing if it isn't:<br><br>`Scanner scan = new Scanner(System.in);`<br>`String name = scan.nextLine();` | 6. Given the following code, write code to print "good" if val is less than 10, "bad" if val is greater than 20, and "ugly" if val is between 10 and 20 inclusive.<br><br>`Scanner scan = new Scanner(System.in);`<br>`int val = scan.nextInt();` |

7. Write code to pull information from a series of Strings of this format:

```
10 speed mountain bike
15 speed road bike
```

Each String has the number of speeds and ends with the word "bike". What I want is code that will take one of these Strings and grab the "mountain" or "road" or (any other thing that is in that spot) and store just that in a new String called **type**. You will use substring and indexOf. Do not use a Scanner.

```
String bike = //contains data in the form listed above;
```

| 8. What is output by the following?<br><br>`System.out.println("say\n\t\"what?\"");` | 9. What is output when the following code runs?<br><br>`System.out.println("abc" + 12 + 3);` |
|---|---|
| 10. Given the following code, write code to print the first character of str uppercase and the rest lowercase.<br><br>`String str = /* contains valid data * /;` | 11. Write code to print the square root of whatever integer value the user enters:<br><br>`Scanner scan = new Scanner(System.in);`<br>`int num = scan.nextInt();` |
| 12. What is output when the following code runs?<br><br>`System.out.println(12 + 3 + "abc");` | 13. What is output by this code?<br><br>`System.out.println( (double) 5/10 );`<br>`System.out.println( (double) (5/10) );` |
| 14. What is printed by the following code?<br><br>`String str = "That's it!";`<br>`System.out.println(str.length());` | 15. Simplify the following boolean statement:<br><br>`!( a<4 || (b>=6 && c!=9) )` |
| 16. What is printed by the following code?<br><br>`String str = "That's it!";`<br>`System.out.println(str.indexOf("t"));` | 17. What is output by the following?<br><br>`int a = 8;`<br>`if(a>3)`<br>` System.out.println(3);`<br>`else`<br>` System.out.println(6);`<br>` System.out.println(4);` |

18. Write a public static method called **scramble** which accepts a String parameter and returns a reversed version of the String with only the first letter capitalized regardless of the case of the input String. Write the method from the opening header all the way to the closing curly bracket. Your method should not print anything.  Examples:    scramble("spoons") returns "Snoops"        scramble("EVIL") returns "Live"