Final Exam Review #3 Name: _____

1. Write a line of code that prints "love" using .substring and the String a:

```
String a = "ungloved";
```

2. What is output by the following:

```
String a = "teach";
for(int i = a.length()-1; i>-1; i-=2)
   System.out.print(a.substring(i,i+1));
```

3. Write code to store a random integer from 11 to 18 inclusive in a variable named **temp**:

4. Write a for loop that prints the numbers 17, 15, 13, etc. down to 1.

5. Write code to print the last two characters of String **str**. Assume the String contains two or more characters.

```
Scanner scan = new Scanner(System.in);
String str = scan.nextLine();
```

6. The Thing class has one instance variable "number". When you create a Thing, you have to send over a positive int which gets stored in **number**. The Thing class has one method: public int getOne() which returns a random integer from between –number and number inclusive. Write the complete Thing class.

7. Write code that uses the Thing class from problem 6 and creates a Thing array with 1000 elements. Leave the element at index 0 as null, and instantiate all the remaining elements with their index number. Then write one line of code which uses the .getOne() method on one of the Thing objects.

8. Declare a boolean array of size 100 named **vals**.

9. After declaring the array in problem 8, what is the value of **vals[42**]?

10. Declare a String array **words** of size 100.

11. What would be printed by the following code?

```
System.out.println(words[99]);
```

12. Given the following code, write an **enhanced for loop** that counts and then prints how many entries in **words** are longer than 10 and contain "lov". Assume the array contains at least one entry.

```
String[] words = //properly initialized;
```

13. Given the following code, write an **enhanced for loop** that prints all values from the array **nums** that are less than 17. Assume the array contains one or more proper values.

```
double[] nums = //properly initialized;
```

13. Given the following code, write code that counts and then prints how many times a 1 immediately follows a 0 in the int array **entries**. For example, if entries contained { 1, 0, 1, 0, 0, 1, 1 } your code would print 2.

```
int[] entries = //properly initialized;
```