Question 1

Where should a method be defined?

○ Where ever it is necessary to have the method

⦿ In a class for which the method makes sense.

○ Within the main method

Which answer is a correct and easy way to make a turtle turn to the right? (lets assume we have created an object of the turtle class called turtle1).

○ turtle1.turn(270);

◉ turtle1.turnRight();

○ turnRight():

○ turtle1.turnRight(90);

What does the variable boo hold after the following lines of code are executed?

```
boolean boo;

boo = true;

boolean boo2 = false;

boo = boo == boo2;
```

- ○ true

- ○ boo2

- ⦿ false

- ○ booboo2

Question 2

What is the following line of code considered?

```
int num;
```

- ○ variable declaration and initialization
- ○ neither variable declaration nor initialization
- ○ variable initialization
- ● variable declaration

Which print statement prints the following:

```
It is the year 2009!
```

○ System.out.println("It is the year " + 2000 + 9 + "!");

⦿ System.out.println("It is the year " + (2000 + 9) + "!");

○ System.out.println("It is the year " 2009 !);

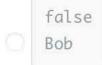○ System.out.println("It is the year" + 2009 +" !");

What would the following code print?

```java
 String name = "Bob";

String name2 = "Sally";

System.out.println(name == name2);

name = name2;

System.out.println(name);
```

○ false
Bob

○ Sally
Sally

⦿ false
Sally

○ false
Bob

○ true
Sally

Question 5

What is stored in the variable num after the following line of code is executed?

```
int num = 100;
```

○ The address in memory where 100 is stored

◉ 100

○ new int(100)

○ "100"

Why does the method

```
drawSquare()
```

use the command:

```
this.forward(30);
```

rather than

```
turtle1.forward(30);
```

or (like we did in class)

```
jose.forward(30);
```

○ I don't know, this seems wrong.

○ "this" refers to any object in Java, so it's the right thing to use

○ turtle1 is a bad Java variable name, that's why they used this

⊙ "this" is the term used to refer to the reference object passed implicitly when a method is called

Question 2

Which is a correct way to get the name of a class?

○ System.out.println(world1.Class());

○ System.out.println(world1.getTheClassName());

⦿ System.out.println(world1.getClass());

The best description of an argument is

○ The stuff that comes in the () after the method name

○ The name that appears after the dot and before the ()

○ A single value that is "passed" to a method to give the method information it needs to do it's job

◉ One or more values that are "passed" to a method to give the methods information it needs to do its job

○ The reference object that appears before the dot when a method is called

Question 4

0 / 1 pts

What is stored in memory for an object? **(pick all that are true)**:

- ☑ null
- ☑ a reference (or address in memory) to where the object information is stored
- ☐ null, when the object has been declared, but not yet assigned to refer to a specific value
- ☑ the object data itself (e.g. a String or Turtle)

```
public class FirstTurtleDemo {
    public static void main (String[] args) {
        World world1 = new World (200,300);
      B Turtle maria = new Turtle (100,  50,  world1);
        maria.forward (25);
      C maria.forward (-50);
      D maria.turnRight;
      E maria.backward (50);
    }
}
```

On which line is the compile error?
A. There is no error

○ A

○ B

○ C

○ E

◉ D

```
int x = 3;
int y = x;
System.out.println(y == 3);
x = 4;
System.out.println(y == 3);
```

What is the output of this code?

---

false

○ true

---

true

○ false

---

true

◉ true

---

false

○ false

Question 1

What is the value stored in second after the code is executed?

int anInteger = 5;

int second;

second = 10;

anInteger = second;

second = second + 4;

- ○ error

- ○ 9

- ○ 4

- ○ 10

- ◉ 14

Where in the World does the Turtle object maria references to after execution?

```
Turtle maria = new Turtle(25, 25, world1);
Turtle jose = new Turtle(100, 50, world1);
maria = jose;
jose = new Turtle(50, 150, world1);
jose.forward(25);
```

○ somewhere else

○ 100,25

○ 50,125

ect! ◉ 100,50

○ 25,25

Question 3

1 / 1 pts

Which class includes the code that runs when you call forward method on jose?

Turtle jose = new Turtle(100,50, world);

jose.forward(100);

- ⊙ Turtle

- ○ TurtleMovement

- ○ jose

In the method header below, which keyword is the **return type**?

public void drawRectangle(int h, int w)

⦿ void

○ draw   void. You selected this answer. This was the
          correct answer.

○ public

○ int

○ int h, int w

Question 2

What does the code snippet below do?

```
World world1 = new World(200,100);
Turtle maria = new Turtle(75, 75, world1);

int distLimit = 15;
int totalDist = 0;
int value = 10;
while (totalDist < distLimit)
{
  maria.forward(value);
  totalDist = totalDist + value;
  value = value+2;
}
```

ect!

- ● Creates 1 turtle and moves it forward 22 units

- ○ Creates 1 turtle and moves it forward 12 units

- ○ Creates 1 turtle and moves it forward 20 units

- ○ Creates 1 turtle and moves it forward 36 units

If I wanted a random integer between 0 and 10 (**including 10**), which line of code would I write below in the space marked "??"?

Random generator = new Random();

int value1 = ??

System.out.println(value1);

(Hint: this question is slightly modified from the one in the podcast! Be careful with the range.)

- ○ generator.nextInt(10);

- ⦿ generator.nextInt(11); **rect!**

- ○ generator.nextDouble(11);

- ○ generator.nextDouble(10);