

Name: Answer Sheet

Date: 06/04/2016

Quiz name: Module 1 - Interfaces and Polymorphism

Score: 100%

Is the following statement true or false?

- ✓ 1. A class may only implement one interface.
- ☐ A true
- ☒ B false
- ☐ C I don't know
-

- ✓ 2. Interface methods are automatically assigned what access modifier?
- ☒ A public
- ☐ B private
- ☐ C protected
- ☐ D default
- ☐ E I don't know
-

```
// #####  
// Greeting.java  
// #####
```

```
public interface Greeting {
```

- ✓ 3. String getGreeting();
- ```
}
```

```
// #####
// English.java
// #####
```

```
public class English implements Greeting {
```

```
 public String getGreeting() {
 return "Hello!";
 }
}
```

```
// #####
// French.java
// #####
```

```
public class French implements Greeting {
```

```
 public String getGreeting() {
 return "Bonjour!";
 }
}
```

```

}
}

// #####
// Spanish.java
// #####

public class Spanish implements Greeting {

 public String getGreeting() {
 return "Hola!";
 }
}

// #####
// GreetingDemo.java
// #####

public class GreetingDemo {

 public static void main(String[] args) {

 Greeting[] greetings = new Greeting[] { new French(), new English(), new Spanish() };

 for(Greeting g : greetings) {

 System.out.print(g.getGreeting() + " ");

 }
 }
}

```

**What is the output displayed by the main method of GreetingDemo when it is executed?**

Bonjour! Hello! Hola!



4.

---

```

// #####
// Shape.java
// #####

public interface Shape {

 public double getArea();
 public double getPerimeter();
}

// #####
// Rectangle.java
// #####

public class Rectangle implements Shape {

 private double length;
 private double width;

 public Rectangle(double length, double width) {

```

```

this.length = length;
this.width = width;
}

public double getArea() {
return length * width;
}
}

```

Select the statement(s) below that are true. (Choose all that apply)

- ☐ A Shape.java will not compile successfully
- ☒ B Rectangle.java will not compile successfully
- ☐ C Both files will compile successfully
- ☐ D I don't know

---

```

// #####
// Shape.java
// #####

```

```

public interface Shape {

```

- ✓ 5. 

```

public double getArea();
public double getPerimeter();
}

```

```

// #####
// Circle.java
// #####

```

```

import java.util.Math;

public class Circle implements Shape {

private double radius;

public Circle(double radius) {

this.radius = radius;
}

public double getArea() {

return Math.PI * Math.pow(radius, 2);
}

public double getPerimeter() {

return Math.PI * 2 * radius;
}
}

```

Select the statement(s) below that are true. (Choose all that apply)

- ☐ A Shape.java will not compile successfully
- ☐ B Circle.java will not compile successfully
- ☒ C Both files will compile successfully

☐ I don't know