Quiz 3

Name: _____

1. Given the following class diagram:

Car
– numWheels : int
+ Car(numWheels : int) + getNumWheels() : int + getSpeed() : int

Person
– name : String – age : int
+ Person(name : String, age : int) + getName() : String

1

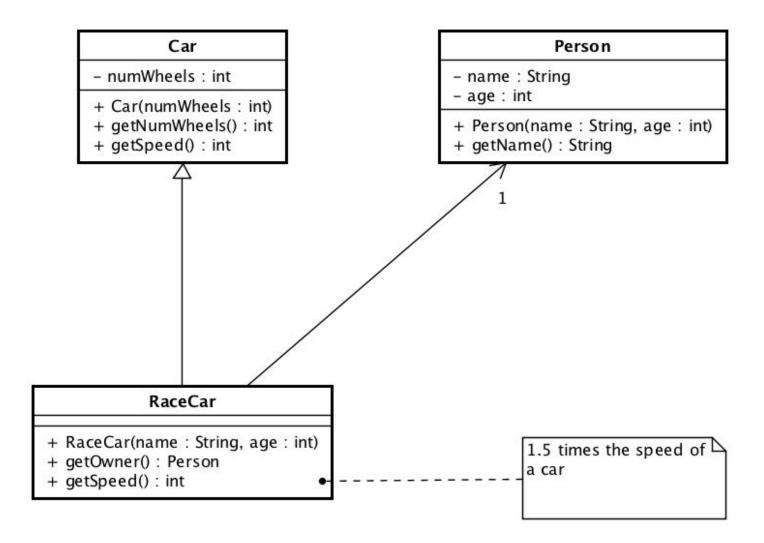| RaceCar |
| --- |
| |
| + RaceCar(name : String, age : int)
+ getOwner() : Person
+ getSpeed() : int |

1.5 times the speed of a car

You are given the Car and Person classes. Implement the RaceCar class.

```java
public class RaceCar extends Car {
    private Person owner;

    public RaceCar(String name, int age) {
        super(4);
        owner = new Person(name, age);
    }

    public Person getOwner() {
        return owner;
    }

    @Override
    public int getSpeed() {
        return (int)(super.getSpeed() * 1.5);
    }
}
```

2. Given the following classes:

```
public class Parent {

    protected void method1(int x, int y){
        // some code
    }

}
```

```
public class Child extends Parent {

    // insert the method below this line

}
```

Which of the following methods in a child class of Parent overrides method1 successfully?
Put a tick for the correct answer(s). Note: There may be more than 1 answer.

✔	`public void method1(int a, int b){`
	`  // some code`
	`}`

	`public void method1(long x, int y){`
	`  // some code`
	`}`

	`public void method1(int x){`
	`  // some code`
	`}`

✔	`protected void method1(int x, int y){`
	`  // some code`
	`}`

	`public boolean method1(int x, int y){`
	`   return true;`
	`}`