Given:

```
public class TestScope {
    public static void main(String[] args) {
        int var1 = 200;
        System.out.print(doCalc(var1));
        System.out.print(" "+var1);
    }
    static int doCalc(int var1){
        var1 = var1 * 2;
        return var1;
    }
}
```

What is the result?

- A. 400 200
- B. 200 200
- C. 400 400
- D. Compilation fails.

## **QUESTION 60**

Given:

1.

```
public class Triangle {
       static double area;
       int b = 2, h = 3;
       public static void main(String[] args) {
           double p, b, h;
                                //line n1
           if (area == 0) {
               b = 3;
               h = 4;
               p = 0.5;
2.
           }
           area = p * b * h; //line n2
           System.out.println("Area is " + area);
       }
   }
```

- A. Area is 6.0
- B. Area is 3.0
- C. Compilation fails at line n1
- D. Compilation fails at line n2.

Given the code fragment:

Which three code fragments can be independently inserted at line n1 to enable the code to print one?

```
A. Byte x = 1;
B. short x = 1;
C. String x = "1";
D. Long x = 1;
E. Double x = 1;
F. Integer x = new Integer ("1");
```

# **QUESTION 65**

Which two are benefits of polymorphism?

- A. Faster code at runtime
- 4. B. More efficient code at runtime
  - C. More dynamic code at runtime
  - D. More flexible and reusable code
  - E. Code that is protected from extension by other classes

Given:

```
public class Product {
    int id;
    String name;
    public Product(int id, String name) {
        this.id = id;
        this.name = name;
    }
}

And given the code fragment:

4. Product p1 = new Product(101, "Pen");
    5. Product p2 = new Product(101, "Pen");
    6. Product p3 = p1;
    7. boolean ans1 = p1 == p2;
    8. boolean ans2 = p1.name.equals(p2.name);
    9. System.out.print(ans1 + ":" + ans2);
```

- A. true:true
- B. true:false
- C. false:true
- D. false:false

```
Given:
```

```
public class SumTest {
        public static void doSum(Integer x, Integer y) {
            System.out.println("Integer sum is " + (x + y));
        }
        public static void doSum(double x, double y) {
            System.out.println("double sum is " + (x + y));
        }
        public static void doSum(float x, float y) {
            System.out.println("float sum is " + (x + y));
        public static void doSum(int x, int y) {
6.
            System.out.println("int sum is " + (x + y));
        public static void main(String[] args) {
            doSum (10, 20);
            doSum(10.0, 20.0);
        }
    }
```

- A. int sum is 30 float sum is 30.0
- B. int sum is 30
   double sum is 30.0
- C. integer sum is 30 double sum is 30.0
- D. integer sum is 30
   float sum is 30.0

Given:

```
public class Test {
    public static int stVar = 100;
    public int var = 200;
    public String toString() {
        return var + ":" + stVar;
    }
}
```

And given the code fragment:

```
Test t1 = new Test();
t1.var = 300;

System.out.println(t1);
Test t2 = new Test();
t2.stVar = 300;
System.out.println(t2);
```

- A. 300:300 200:300
- B. 300:100 200:300
- C. 300:0 0:300
- D. 200:300 200:300

Given:

```
class Student {
      String name;
      public Student(String name) {
           this.name = name;
       }
  }
  public class Test {
      public static void main(String[] args) {
           Student[] students = new Student[3];
           students[1] = new Student("Richard");
           students[2] = new Student("Donald");
           for (Student s: students ) {
               System.out.println("" + s.name);
8.
           }
       }
  }
```

- A. null
  Richard
  Donald
- B. Richard Donald
- C. Compilation fails.
- D. An ArrayIndexOutOfBoundsException is thrown at runtime.
- E. A NullPointerException is thrown at runtime.

## Given the code fragment:

```
public class Test {
      static int count = 0;
      int i = 0;
      public void changeCount() {
           while (i < 5) {
               i++;
               count++;
           }
      public static void main(String[] args) {
           Test check1 = new Test();
9.
           Test check2 = new Test();
           check1.changeCount();
           check2.changeCount();
           System.out.println(check1.count + " : " + check2.count);
       }
  }
```

### What is the result?

A. 10:10

B. 5:5

C. 5:10

D. Compilation fails

### **QUESTION 13**

Which statement best describes encapsulation?

- A. Encapsulation ensures that classes can be designed so that only certain fields and methods of an object are accessible from other objects.
- 10. B. Encapsulation ensures that classes can be designed so that their methods are inheritable.
  - C. Encapsulation ensures that classes can be designed with some fields and methods declared as abstract.
  - D. Encapsulation ensures that classes can be designed so that if a method has an argument MyType x, any subclass of MyType can be passed to that method.