

## AP COMPUTER SCIENCE A – QUIZ #3 STUDY GUIDE

Problems **1** through **3** concern the class `ReturnTest` listed here:

```
public class ReturnTest {
    /**/
    public ReturnTest () { }
    /**/
    public static void multTwo ( int i, int j ) {
        i *= 2;    j *= 2;
        return;
    }
    /**/
    public static void timesTwo ( int [] ia ) {
        for ( int i=0; i<ia.length; ++i ) {
            ia[i] *= 2;
        }
        return;
    }
    /**/
    public static int multBy2 ( int i ) {
        i *= 2;
        return i;
    }
}
```

**1)** What is the output of the code segment?

```
int x=4, y=5;
ReturnTest.multTwo(x,y);
System.out.println(x);
System.out.println(y);
```

*Ans.*

4  
5

**2)** What is the output of the code segment?

```
int [] intA=new int [] { 4 , 5 };
ReturnTest.timesTwo(intA);
for ( int i=0; i<2; ++i ) System.out.println(intA[i]);
```

*Ans.*

8  
10

**3)** What is the output of the code segment?

```
int z=4;
z=ReturnTest.multBy2(z);
System.out.println(z);
```

*Ans.*

8

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Problems 4 through 6 concern the class `TwoDoubles` listed here:

```
public class TwoDoubles {  
    /**/  
    private double x, y;  
    /**/  
    public TwoDoubles ( double a, double b ) {  
        x=a;  y=b;  
    }  
    /**/  
    public double getX () { return x; }  
    /**/  
    public double getY () { return y; }  
    /**/  
    public void setX ( double a ) {  
        x=a;  
        return;  
    }  
    /**/  
    public void setY ( double b ) {  
        y=b;  
        return;  
    }  
    /**/  
    public TwoDoubles timesTwo () {  
        double a, b;  
        a=2*x;  b=2*y;  
        return new TwoDoubles(a,b);  
    }  
}
```

4) What is the output of the code segment?

```
TwoDoubles td=new TwoDoubles(48.7,19.3);  
td.setY(14.8);  
System.out.println(td.getX());  
System.out.println(td.getY());
```

*Ans.*

48.7  
14.8

5) What is the output of the code segment?

```
TwoDoubles d2=new TwoDoubles(13.8,27.9);  
d2.setY(d2.getX());  
System.out.println(d2.getX());  
System.out.println(d2.getY());
```

*Ans.*

13.8  
13.8

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6) What is the output of the code segment?

```
TwoDoubles twoD=new TwoDoubles(41.3,32.8);  
twoD=twoD.timesTwo();  
System.out.println(twoD.getX());  
System.out.println(twoD.getY());
```

*Ans.*

82.6  
65.6

Problems 7 and 8 concern an array declared as

```
int [] ia=new int [] { 17 , -4 , -32 , 99 };
```

7) What is the output of the code segment?

```
for ( int i=0; i<ia.length; ++i ) {  
    if ( ia[i] == -32 ) break;  
    System.out.println(ia[i]);  
}
```

*Ans.*

17  
-4

8) What is the output of the code segment?

```
for ( int i=0; i<ia.length; ++i ) {  
    if ( ia[i] == -32 ) continue;  
    System.out.println(ia[i]);  
}
```

*Ans.*

17  
-4  
99