CHAPTER 3 REVIEW DRILL

Answers to the review questions can be found in Chapter 9.

1. Consider the following code segment:

```
Line 1:   int a = 10;
Line 2:   double b = 10.7;
Line 3:   double c = a + b;   20.7
Line 4:   int d = a + c;   ← cannot assign double to integer
Line 5:   System.out.println(c + " " + d);
```

What will be output as a result of executing the code segment?

(A) 20   20
(B) 20.0   30
(C) 20.7   31
(D) 20.7   30.7
(E) Nothing will be printed because of a compile-time error.

2. Consider the following code segment:

```
Line 1:   int a = 10;
Line 2:   double b = 10.7;
Line 3:   int d = a + b;
```

Line 3 will not compile in the code segment above. With which of the following statements could we replace this line so that it compiles?

```
I.    int d = (int) a + b;
II.   int d = (int) (a + b);   ← can still cast double to int
III.  int d = a + (int) b;
```

(A) I
(B) II
(C) III
(D) I and III
(E) II and III

3. Consider the following code segment.

```
Line 1:  int a = 11;
Line 2:  int b = 4;
Line 3:  double x = 11;
Line 4:  double y = 4;
Line 5:  System.out.print(a/b);    int
Line 6:  System.out.print(", ");
Line 7:  System.out.print(x/y);    double
Line 8:  System.out.print(", ");
Line 9:  System.out.print(a/y);    double
```

What is printed as a result of executing the code segment?

(A) 3, 2.75, 3
(B) 3, 2.75, 2.75
(C) 2, 3, 2
(D) 2, 2.75, 2.75
(E) Nothing will be printed because of a compile-time error.