

10. Show the output produced by each of the following program fragments. Assume that *i* and *j* are `int` variables.

```
(a) i = 6;
    j = i += i;
    printf("%d %d", i, j);
(b) i = 5;
    j = (i -= 2) + 1;
    printf("%d %d", i, j);
(c) i = 7;
    j = 6 + (i = 2.5);
    printf("%d %d", i, j);
(d) i = 2; j = 8;
    j = (i = 6) + (j = 3);
    printf("%d %d", i, j);
```

Section 4.3

- *11. Show the output produced by each of the following program fragments. Assume that *i*, *j*, and *k* are `int` variables.

```
(a) i = 1;
    printf("%d ", i++ - 1);
    printf("%d", i);
(b) i = 10; j = 5;
    printf("%d ", i++ - ++j);
    printf("%d %d", i, j);
(c) i = 7; j = 8;
    printf("%d ", i++ - --j);
    printf("%d %d", i, j);
(d) i = 3; j = 4; k = 5;
    printf("%d ", i++ - j++ + --k);
    printf("%d %d %d", i, j, k);
```

12. Show the output produced by each of the following program fragments. Assume that *i* and *j* are `int` variables.

```
(a) i = 5;
    j = ++i * 3 - 2;
    printf("%d %d", i, j);
(b) i = 5;
    j = 3 - 2 * i++;
    printf("%d %d", i, j);
(c) i = 7;
    j = 3 * i-- + 2;
    printf("%d %d", i, j);
(d) i = 7;
    j = 3 + --i * 2;
    printf("%d %d", i, j);
```

- W 13. Only one of the expressions `++i` and `i++` is exactly the same as `(i += 1)`: which is it? Justify your answer.

Section 4.4

14. Supply parentheses to show how a C compiler would interpret each of the following expressions.