

7.9

$$(d) ((-a)^1 \text{ or } ((c = d)^2 \text{ and } e)^3)^4$$

$$(e) (((a > b)^1 \text{ xor } c)^3 \text{ or } (d \leq 17)^2)^4$$

7.10

$$(d) (-(a \text{ or } (c = (d \text{ and } e)^1)^2)^3)^4$$

$$(e) (a > (b \text{ xor } (c \text{ or } (d \leq 17)^1)^2)^3)^4$$

7.13

$$\begin{aligned} \text{a. } \text{sum1} &= (i_{\text{old}} / 2) + \text{fun}(\&i_{\text{new}}) = (10 / 2) + (3 * (10 + 4) - 1) \\ &= 5 + 41 = 46 \end{aligned}$$

$$\begin{aligned} \text{sum2} &= \text{fun}(\&j_{\text{old}}) + (j_{\text{new}}/2) = (3 * (10 + 4) - 1) + (14 / 2) \\ &= 41 + 7 = 48 \end{aligned}$$

$$\begin{aligned} \text{b. } \text{sum1} &= \text{fun}(\&i_{\text{old}}) + (i_{\text{new}}/2) = (3 * (10 + 4) - 1) + (14 / 2) \\ &= 41 + 7 = 48 \end{aligned}$$

$$\begin{aligned} \text{sum2} &= (j_{\text{old}} / 2) + \text{fun}(\&j_{\text{new}}) = (10 / 2) + (3 * (10 + 4) - 1) \\ &= 5 + 41 = 46 \end{aligned}$$

7.19

$$\text{a. } x = x_{\text{old}} + \text{fun}(\&x_{\text{new}}) = 3 + 4 = 7$$

$$\text{b. } x = \text{fun}(\&x_{\text{old}}) + x_{\text{new}} = 4 + (3 + 5) = 12$$

### 8.3

```
switch (k)
{
    case 1:
    case 2:
        j = 2 * k - 1;
        break;
    case 3:
    case 5:
        j = 3 * k + 1;
        break;
    case 4:
        j = 4 * k - 1;
        break;
    case 6:
    case 7:
    case 8:
        j = k - 2;
        break;
    default:
        break;
}
```

### 8.4

```
int j = -3;
for (int i = 0; i < 3; i++)
{
    if ((j + 2) == 3 || (j + 2) == 2)
    {
        j--;
    } else if ((j + 2) == 0)
    {
        j += 2;
    } else
    {
        j = 0;
    }
}
```

```
    if (j <= 0)
    {
        j = 3 - i;
    }
}
```

9.5

(a)

value = 2, list = {1, 3, 5, 7, 9}

value = 2, list = {1, 3, 5, 7, 9}

value = 2, list = {1, 3, 5, 7, 9}

(b)

value = 1, list = {2, 3, 5, 7, 9}

value = 1, list = {3, 2, 5, 7, 9}

value = 2, list = {3, 1, 5, 7, 9}

(c)

value = 1, list = {2, 3, 5, 7, 9}

value = 1, list = {3, 2, 5, 7, 9}

value = 2, list = {3, 1, 5, 7, 9}

9.7

(a)

list = {1,3}

(b)

list = {2,6}

(c)

list = {2,6}