```
{computation of invariants}
                   #2
 (1)
                              #1
 (2)
                                         15
                              #1
 (3)
                                                     {loop initialization}
                    #1
 (4)
         :=
                                          (16)
                    I
                              #10
 (5)
         JGT
                                                     {subscript calculation for X}
                    I
                              #1
 (6)
                    \mathbf{i}_1
                              #10
 (7)
         *
                                         \mathbf{1}_{6}^{-}
                    \mathbf{i_2}
 (8)
                              #3
 (9)
                                                      {subscript calculation for Y}
                                         i<sub>12</sub>
(10)
                              #3
                    i<sub>12</sub>
                                         \mathtt{i}_{13}
(11)
                                                      {assignment operation}
                                         x[i_{7}]
                    Y[i<sub>13</sub>]
(12)
                                          1<sub>14</sub>
                                                      {end of loop}
                    #1
(13)
                   i<sub>14</sub>
                                          I
(14)
                                          (5)
(15)
                                                      {next statement}
(16)
                                                 (d)
```

Figure 5.27 (cont'd)