```
14.0
          +2.000000x_1 +3.000000x_2
                                            +3.000000x_4
                                                                   +1.000000x_6 -3.000000x_7
x_8
                                 -1.000000x_3 + 1.000000x_4 - 2.000000x_5 - 3.000000x_6 - 1.000000x_7
     1.0
          +1.000000x_1
x_9
     9.0
          +2.000000x_1 -1.000000x_2 -1.000000x_3 +1.000000x_4
                                                                   +1.000000x_6
x_{10}
x_{11}
     13.0
          -2.000000x_1 - 2.000000x_2 - 3.000000x_3 - 2.000000x_4 + 2.000000x_5 - 1.000000x_6 + 3.000000x_7
    14.0
                      +3.000000x_2 +2.000000x_3 +3.000000x_4 -3.000000x_5 +1.000000x_6 -3.000000x_7
x_{12}
     8.0
          x_{13}
     9.0
          +2.000000x_1
                                 +1.000000x_3 +3.000000x_4 -3.000000x_5 +2.000000x_6
x_{14}
x_{15}
     5.0
          +2.000000x_1 +1.000000x_2 -2.000000x_3 +3.000000x_4 +1.000000x_5 -2.000000x_6
     3.0
x_{16}
x_{1\underline{7}}
     5.0
          -1.000000x_1 - 2.000000x_2 - 1.000000x_3 - 1.000000x_4 - 2.000000x_5
     0.0
          -2.000000x_1 - 2.000000x_2 - 1.000000x_3 + 2.000000x_4
                                                                   -1.000000x_6 - 2.000000x_7
 z
```

No initialization required –; Proceed to Optimize.

```
x_8
   14.0
       +2.000000x_1 +3.000000x_2
                                  +3.000000x_4
                                                   +1.000000x_6 -3.000000x_7
    1.0
        +1.000000x_1
                         -1.000000x_3 + 1.000000x_4 - 2.000000x_5 - 3.000000x_6 - 1.000000x_7
x_9
    9.0
        +2.000000x_1 -1.000000x_2 -1.000000x_3 +1.000000x_4
x_{10}
                                                    +1.000000x_6
   13.0
        x_{11}
x_{12}
   14.0
                +3.000000x_2 +2.000000x_3 +3.000000x_4 -3.000000x_5 +1.000000x_6 -3.000000x_7
    8.0
        x_{13}
x_{14}
    9.0
                         +1.000000x_3 +3.000000x_4 -3.000000x_5 +2.000000x_6
    5.0
        x_{15}
        3.0
x_{16}
        -1.000000x_1 - 2.000000x_2 - 1.000000x_3 - 1.000000x_4 - 2.000000x_5
    5.0
                                                            +3.000000x_7
x_{17}
    0.0
        -2.000000x_1 - 2.000000x_2 - 1.000000x_3 + 2.000000x_4
                                                    -1.000000x_6 - 2.000000x_7
z
```

 $x_4$  enters and  $x_{15}$  leaves

```
+6.500000x_1
   21.5
                      -1.500000x_3 - 1.500000x_{15} + 4.500000x_5 + 2.500000x_6
x_8
   3.5
       +2.500000x_1 - 1.000000x_2 - 1.500000x_3 - 0.500000x_{15} - 0.500000x_5 - 2.500000x_6
x_9
      11.5
x_{10}
   8.0
       -5.000000x_1
                      -2.000000x_3 + 1.000000x_{15} - 1.000000x_5 - 2.000000x_6 + 1.000000x_7
x_{11}
   21.5
      +4.500000x_1
                      +0.500000x_3 -1.500000x_{15} +1.500000x_5 +2.500000x_6
x_{12}
       x_{13}
   15.5
   16.5
       x_{14}
   2.5
       x_4
   10.5
      +6.500000x_1 - 2.000000x_2 - 3.500000x_3 - 1.500000x_{15} + 5.500000x_5 - 0.500000x_6 + 3.000000x_7
x_{16}
       x_{17}
       +1.000000x_1 - 4.000000x_2 - 2.000000x_3 - 1.000000x_{15} + 3.000000x_5
   5.0
```

 $x_1$  enters and  $x_{17}$  leaves

```
28.0
x_8
 6.0
   -1.000000x_{17} - 2.000000x_2 - 2.000000x_3
                -4.000000x_5 -3.000000x_6 +2.000000x_7
x_9
 15.0
   x_{10}
 3.0
   +2.000000x_{17} +2.000000x_2 -1.000000x_3
                +6.000000x_5 -1.000000x_6 -3.000000x_7
x_{11}
   26.0
x_{12}
   x_{13}
 18.0
 23.0
   x_{14}
   x_4
 4.0
   17.0
x_{16}
   1.0
x_1
 6.0
```

 $x_5$  enters and  $x_1$  leaves

```
-1.285714x_{17} - 1.285714x_2 - 2.142857x_3 - 0.857143x_{15} + 3.285714x_1 + 1.857143x_6 + 2.571429x_7
                                                                 24.7142857143
     x_8
                                                                3.14285714286
                                                                                                                                                                                                                                                  +0.142857x_{17} - 0.857143x_2 - 1.428571x_3 - 0.571429x_{15} + 2.857143x_1 - 2.428571x_6 - 0.285714x_7 - 0.28571
     x_9
 x_{10}
                                                                 12.5714285714
                                                                                                                                                                                                                                                   -0.428571x_{17} - 2.428571x_2 - 1.714286x_3 - 0.285714x_{15} + 2.428571x_1 + 1.285714x_6 + 1.857143x_7 + 1.285714x_6 + 1.85714x_6 + 1.85714x_
                                                                 7.28571428571
                                                                                                                                                                                                                                                  +0.285714x_{17} + 0.285714x_2 - 1.857143x_3 + 0.857143x_{15} - 4.285714x_1 - 1.857143x_6 + 0.428571x_7 + 0.285714x_1 - 1.857143x_2 + 0.4285714x_1 - 1.857143x_2 + 0.4285714x_1 - 1.857143x_2 + 0.4285714x_1 - 1.857143x_2 + 0.4285714x_1 - 0.4285714x_1 - 0.4285714x_2 - 0.4285714x_1 - 0.4285714x_2 - 0.4285714
x_{11}
                                                                                                                                                                                                                                                  22.5714285714
x_{12}
                                                                 19.4285714286
                                                                                                                                                                                                                                                  -1.571429x_{17} - 5.571429x_2 - 4.285714x_3 - 0.714286x_{15} - 1.428571x_1 + 2.714286x_6 + 5.142857x_7 + 2.714286x_7 + 2.71428
x_{13}
                                                                   17.5714285714
                                                                                                                                                                                                                                                     -0.428571x_{17} - 3.428571x_2 - 0.714286x_3 - 1.285714x_{15} + 5.428571x_1 + 3.285714x_6 + 3.857143x_7
x_{14}
     x_4
                                                                3.57142857143
                                                                                                                                                                                                                                                  x_{16}
                                                                14.4285714286
                                                                                                                                                                                                                                                   -1.571429x_{17} - 3.571429x_2 - 4.285714x_3 - 0.714286x_{15} + 2.571429x_1 - 1.285714x_6 + 6.142857x_7 + 2.571429x_1 - 1.285714x_2 + 2.571429x_1 - 2.571428x_1 - 2.57142
                                                          0.714285714286
                                                                                                                                                                                                                                                   7.14285714286
                                                                                                                                                                                                                                                   -0.857143x_{17} - 4.857143x_2 - 2.428571x_3 - 0.571429x_{15} - 1.142857x_1 - 0.428571x_6 + 1.714286x_7 - 0.428571x_6 + 0.42857
```

 $x_7$  enters and  $x_9$  leaves

```
53.0
                  -9.000000x_2 -15.000000x_3 -6.000000x_{15} +29.000000x_1 -20.000000x_6 -9.000000x_9
x_8
   11.0
        +0.500000x_{17} -3.000000x_2 -5.000000x_3 -2.000000x_{15} +10.000000x_1 -8.500000x_6 -3.500000x_9
x_7
        33.0
x_{10}
        +0.500000x_{17} -1.000000x_2 -4.000000x_3 +0.000000x_{15} -0.000000x_1 -5.500000x_6 -1.500000x_9
   12.0
x_{11}
   32.0
                  -3.0000000x_2 -4.000000x_3 -3.0000000x_{15} +12.000000x_1 -5.000000x_6 -3.000000x_9
x_{12}
x_{13}
   76.0
        +1.000000x_{17} - 21.000000x_2 - 30.000000x_3 - 11.000000x_{15} + 50.000000x_1 - 41.000000x_6 - 18.000000x_9
   60.0
        x_{14}
        x_4
   24.0
   82.0
        x_{16}
x_5
    7.0
                 -2.000000x_2 -3.000000x_3 -1.000000x_{15} +5.000000x_1 -5.000000x_6 -2.000000x_9
                 -10.000000x_2 - 11.000000x_3 - 4.000000x_{15} + 16.000000x_1 - 15.000000x_6 - 6.000000x_9
   26.0
```

 $x_1$  enters and  $x_{11}$  leaves

```
1.95906583791e + 17
      x_8
      x_7
 6.75539944106e + 16
 1.41863388262e + 17
      x_{10}
      6.75539944106e + 15
x_1
 8.10647932927e + 16
      x_{12}
 3.37769972053e + 17
      x_{13}
 2.97237575406e + 17\\
      x_{14}
      1.2835258938e + 17
x_4
 4.32345564228e + 17
      x_{16}
      3.37769972053e + 16
x_5
      1.08086391057e + 17
```

 $x_{17}$  enters and Unbounded Dictionary!