```
1.0
              -1.000000x_2 -1.000000x_3 +2.000000x_4 -3.000000x_5
                                                      -3.000000x_7
x_8
   6.0
       x_9
   2.0
       x_{10}
x_{11}
   10.0
       +3.000000x_1 -3.000000x_2 -2.000000x_3 +1.000000x_4
                                              +1.000000x_6 -1.000000x_7
       13.0
x_{12}
   12.0
       -2.000000x_1
                      -3.000000x_3 + 1.000000x_4 + 1.000000x_5 + 2.000000x_6 - 3.000000x_7
x_{13}
       -2.000000x_1 + 1.000000x_2 + 3.000000x_3
   9.0
                                      +2.000000x_5 -3.000000x_6 +2.000000x_7
x_{14}
       x_{15}
   5.0
              +1.000000x_2 +1.000000x_3 -2.000000x_4 +2.000000x_5 +2.000000x_6 -3.000000x_7
   5.0
x_{16}
x_{1\underline{7}}
   11.0
       -1.000000x_1 + 1.000000x_2 - 1.000000x_3 - 2.000000x_4
   0.0
                                              -2.000000x_6 + 1.000000x_7
```

No initialization required –; Proceed to Optimize.

```
x_8
   1.0
            -1.000000x_2 -1.000000x_3 +2.000000x_4 -3.000000x_5
                                              -3.000000x_7
   6.0
      x_9
   2.0
      x_{10}
  10.0
      +3.000000x_1 -3.000000x_2 -2.000000x_3 +1.000000x_4
                                       +1.000000x_6 -1.000000x_7
x_{11}
x_{12}
  13.0
      -3.000000x_3 + 1.000000x_4 + 1.0000000x_5 + 2.0000000x_6 - 3.0000000x_7
  12.0
      -2.000000x_1
x_{13}
x_{14}
   9.0
      -2.000000x_1 + 1.000000x_2 + 3.000000x_3
                                +2.000000x_5 -3.000000x_6 +2.000000x_7
   5.0
      x_{15}
   5.0
x_{16}
            11.0
x_{17}
   0.0
      -1.000000x_1 + 1.000000x_2 - 1.000000x_3 - 2.000000x_4
                                       -2.000000x_6 + 1.000000x_7
z
```

 x_2 enters and x_8 leaves

```
1.0
              -1.000000x_8 - 1.000000x_3 + 2.000000x_4 - 3.000000x_5
                                                    -3.000000x_7
x_2
   9.0
      x_9
   1.0
      x_{10}
x_{11}
   7.0
      11.0
      +2.000000x_1 + 2.000000x_8 - 1.000000x_3 - 2.000000x_4 + 8.000000x_5 + 2.000000x_6 + 7.000000x_7
x_{12}
   12.0
      -2.000000x_1
                     -3.000000x_3 + 1.000000x_4 + 1.000000x_5 + 2.000000x_6 - 3.000000x_7
x_{13}
      10.0
                             -4.000000x_4 + 11.000000x_5 + 3.000000x_6 + 6.000000x_7
   2.0
      +1.000000x_1 +3.000000x_8
x_{15}
   6.0
                                     -1.000000x_5 +2.000000x_6 -6.000000x_7
              -1.000000x_8
x_{16}
   9.0
      x_{17}
      -1.000000x_1 -1.000000x_8 -2.000000x_3
                                    -3.000000x_5 -2.000000x_6 -2.000000x_7
   1.0
```

 x_{-1} enters and Final Dictionary Solution: 1.0 Num Pivots: 1