```
6.0
     -1.000000x_1 + 3.000000x_2 + 3.000000x_3
                                 x_{14}
     9.0
                                                  +1.00
x_{15}
  7.0
     x_{16}
  15.0
     x_{17}
     13.0
x_{18}
  13.0
     -3.000000x_1 - 1.000000x_2 + 1.000000x_3 - 3.000000x_4
                                 -1.000000x_6
x_{19}
     14.0
x_{20}
  8.0
     -2.000000x_1 - 1.000000x_2 - 1.000000x_3 - 3.000000x_4 - 3.000000x_5 - 1.000000x_6
                                            -3.000000x_8 - 3.00
x_{21}
     +2.000000x_1 +3.000000x_2 +3.000000x_3 +2.000000x_4
  4.0
                                 +2.000000x_6 -2.000000x_7 -1.000000x_8
x_{22}
x_{23}
  4.0
                     -3.000000x_1 + 2.000000x_2
  15.0
     x_{24}
     +3.000000x_1 -1.000000x_2 +3.000000x_3
                           +3.000000x_5 -2.000000x_6
  1.0
                                            -2.000000x_8 - 2.00
x_{25}
  13.0
     x_{26}
  6.0
     +3.000000x_1 -2.000000x_2 +2.000000x_3
                           x_{27}
  6.0
     +1.000000x_1 +3.000000x_2
                     x_{28}
  11.0
                     +2.000000x_1 - 1.000000x_2
x_{29}
     4.0
x_{30}
  6.0
     -3.000000x_1
                x_{31}
  15.0
                                      -3.000000x_7 + 3.000000x_8
x_{32}
     -3.000000x_1 - 2.000000x_2 - 3.000000x_3 + 1.000000x_4
     9.0
x_{33}
  0.0
     -1.000000x_1 - 1.000000x_2 + 2.000000x_3 - 2.000000x_4 + 1.000000x_5 - 2.000000x_6 - 1.000000x_7
z
```

No initialization required –; Proceed to Optimize.

```
-1.000000x_1 + 3.000000x_2 + 3.000000x_3
                          6.0
x_{14}
    9.0
x_{15}
x_{16}
  7.0
    15.0
x_{17}
 13.0
    x_{18}
    -3.000000x_1 - 1.000000x_2 + 1.000000x_3 - 3.000000x_4
 13.0
                          -1.000000x_6
x_{19}
 14.0
    x_{20}
    x_{21}
  8.0
                                   -3.000000x_8 -3.00
                          +2.000000x_6-2.000000x_7-1.000000x_8\\
  4.0
    +2.000000x_1 +3.000000x_2 +3.000000x_3 +2.000000x_4
x_{22}
  4.0
    -3.000000x_1 + 2.000000x_2
                 x_{23}
   15.0
x_{24}
  1.0
    +3.000000x_1 - 1.000000x_2 + 3.000000x_3
                      +3.000000x_5 -2.000000x_6
                                   -2.000000x_8 - 2.00
x_{25}
 13.0
    x_{26}
  6.0
    +3.000000x_1 -2.000000x_2 +2.000000x_3
                      x_{27}
  6.0
    +1.000000x_1 +3.000000x_2
                 x_{28}
                 11.0
    +2.000000x_1 -1.000000x_2
x_{29}
    4.0
x_{30}
  6.0
    -3.000000x_1
             x_{31}
 15.0
    -3.000000x_1 - 2.000000x_2 - 3.000000x_3 + 1.000000x_4
                               -3.000000x_7 + 3.0000000x_8
x_{32}
    9.0
x_{33}
  0.0
```

 $x_3$  enters and  $x_{16}$  leaves

```
13.0
        x_{14}
        4.33333333333
x_{15}
        2.33333333333
x_3
x_{17}
  17.3333333333
             -1.666667x_2 - 0.3333333x_{16} + 3.666667x_4 - 3.666667x_5 + 1.000000x_6 - 2.666667x_7 - 4.000
    6.0
        x_{18}
  15.3333333333
        x_{19}
        9.33333333333
x_{20}
x_{21}
  5.66666666667
        -1.000000x_1 - 0.333333x_2 + 0.333333x_{16} - 3.666667x_4 - 2.333333x_5
                                       -0.3333333x_7 -2.000
        x_{22}
    11.0
                       4.0
        -3.000000x_1 + 2.000000x_2
x_{23}
        10.3333333333
x_{24}
             -3.000000x_2 - 1.000000x_{16} + 2.000000x_4 + 1.000000x_5 - 5.000000x_6 + 1.000000x_7 - 5.000
    8.0
x_{25}
        8.33333333333
x_{26}
  10.666666667
        x_{27}
        +1.000000x_1 +3.000000x_2
                       +1.000000x_4 -2.000000x_5 -2.0000000x_6 +2.0000000x_7 +3.000
    6.0
x_{28}
                       11.0
        +2.000000x_1 -1.000000x_2
x_{29}
        6.33333333333
x_{30}
  3.6666666667
        -2.000000x_1 + 0.666667x_2 + 0.3333333x_{16} + 1.333333x_4 + 1.666667x_5
                                       +0.666667x_7 +4.000
x_{31}
                  x_{32}
    8.0
  11.3333333333
        x_{33}
  4.6666666667
        z
```

 $x_9$  enters and  $x_{31}$  leaves

```
17.5833333333
        x_{14}
  3.41666666667
        x_{15}
x_3
    3.25
        -1.500000x_1 - 0.500000x_2 - 0.250000x_{16} + 1.000000x_4 - 0.250000x_5 - 1.000000x_6 + 0.500000x_7
        -1.000000x_1 - 1.333333x_2 - 0.166667x_{16} + 4.333333x_4 - 2.833333x_5 + 1.000000x_6 - 2.333333x_7 - 2.00
x_{17}
  19.1666666667
    6.0
        x_{18}
        16.25
x_{19}
        5.6666666667
x_{20}
                        -5.000000x_4 - 4.000000x_5
    2.0
        +1.000000x_1 -1.000000x_2
                                       -1.000000x_7 -6.00
x_{21}
        13.75
x_{22}
        x_{23}
    1.25
  10.3333333333
        x_{24}
        x_{25}
  8.91666666667
    3.75
        x_{26}
        x_{27}
  13.4166666667
        +2.500000x_1 +2.500000x_2 -0.250000x_{16}
    3.25
                             -3.250000x_5 - 2.000000x_6 + 1.500000x_7
x_{28}
        13.75
x_{29}
    7.25
        x_{30}
  0.916666666667
        -0.500000x_1 + 0.166667x_2 + 0.0833333x_{16} + 0.333333x_4 + 0.416667x_5
                                       +0.166667x_7 +1.00
x_9
    5.25
        x_{32}
    12.25
         x_{33}
    6.5
        -4.000000x_1 - 2.000000x_2 - 0.500000x_{16}
                             +0.500000x_5 -4.000000x_6
z
```

 $x_5$  enters and  $x_{21}$  leaves

```
17.625
x_{14}
      2.375
               x_{15}
      3.125
               x_3
      17.75
               x_{17}
               +1.750000x_1+1.250000x_2+1.000000x_{16}-1.750000x_4+0.250000x_{21}+4.000000x_6-1.750000x_7+7.500000x_8-1.000000x_8
       5.5
x_{18}
      16.125
               x_{19}
               5.0
x_{20}
x_5
        0.5
               +0.250000x_1 -0.250000x_2
                                                           -1.250000x_4 - 0.250000x_{21}
                                                                                                      -0.250000x_7 - 1.500000x_8 +
               x_{22}
      13.375
       2.125
               x_{23}
               10.0
x_{24}
      9.625
               x_{25}
               2.875
x_{26}
      12.375
               x_{27}
      1.625
               x_{28}
      12.875
               +0.062500x_1 - 0.062500x_2 + 0.250000x_{16} + 4.187500x_4 + 0.437500x_{21} - 3.000000x_6 - 0.062500x_7 + 6.625000x_8 - 0.062500x_7 + 0.062500x_8 - 0.00000x_8 - 0.00000x
x_{29}
      8.625
               x_{30}
       1.125
               -0.395833x_1 + 0.062500x_2 + 0.0833333x_{16} - 0.187500x_4 - 0.104167x_{21}
                                                                                                      +0.062500x_7 +0.375000x_8
x_9
               x_{32}
      5.625
      11.625
               x_{33}
       6.75
               z
```

 $x_{13}$  enters and  $x_{28}$  leaves

```
18.7575757576
                                                                                           -5.303030x_1 + 4.121212x_2 -0.757576x_{16} +6.393939x_4 +0.545455x_{21} -3.393939x_6 +4.424242x_7 +6.393939x_6 +4.393930x_6 +4.424242x_7 +6.393930x_6 +4.393930x_6 +4.393930x_6 +4.424242x_7 +6.393930x_6 +4.42424x_7 +6.393930x_6 +4.3930x_6 +4.3930x_6 +4.3930x_6 +4.3930x_6 +4.42424x_7 +6.3930x_6 +4.3930x_6 +4.300x_6 +4.300x
x_{14}
                                                                                          +2.803030x_1 -3.621212x_2 +0.757576x_{16} +0.106061x_4 -0.045455x_{21} +2.393939x_6 -0.924242x_7 +0.045455x_{21}
                        1.24242424242
x_{15}
 x_3
                        3.27272727273
                                                                                           -1.409091x_1 -0.136364x_2 -0.272727x_{16} +1.681818x_4 +0.136364x_{21} -1.181818x_6 +0.772727x_7 +0.181818x_6
                        18.2424242424
                                                                                          x_{17}
                        4.90909090909
                                                                                          x_{18}
                                                                                           18.6363636364
x_{19}
                        1.06060606061
                                                                                            -1.424242x_1 -9.030303x_2 +0.939394x_{16} -13.848485x_4 -1.636364x_{21} +9.848485x_6 -4.606061x_7 -1.636364x_{21}
x_{20}
                                                                                            +0.863636x_1 +0.954545x_2 -0.090909x_{16} +0.227273x_4 +0.045455x_{21} -0.727273x_6 +0.590909x_7 +0.045455x_{21} +0.045455x_{22} +0.045455x_{21} +0.045455x_{22} +0.045455x_{21} +0.045455x_{22} +0.045455x_{22} +0.045455x_{21} +0.045455x_{22} +0.045455x_{22} +0.045455x_{21} +0.045455x_{22} +0.04545x_{22} +0.04545x_{22} +0.04545x_{22} +0.04545x_{22} +0.04545x_{22} +0.0454x_{22} 
 x_5
                        1.09090909091
                        11.4545454545
                                                                                            -4.681818x_1 -2.227273x_2 -0.45454545x_{16} +1.136364x_4 -0.772727x_{21} +1.363636x_6 -3.045455x_7 -
x_{22}
                                                                                           x_{23}
                                              7.0
                        6.84848484848
                                                                                           -4.439394x_1 -1.924242x_2 +1.151515x_{16} -6.378788x_4 -1.409091x_{21} +4.878788x_6 -2.984848x_7 -8.439394x_1 -1.409091x_2
x_{24}
                                                                                           x_{25}
                          9.9696969697
                        6.27272727273
                                                                                           +6.590909x_1 + 8.863636x_2 - 0.272727x_{16} + 6.681818x_4 + 2.136364x_{21} - 0.181818x_6 + 6.772727x_7 + 1.066481818x_8 + 0.066481818x_8 + 0.0664818x_8 + 0.066488x_8 + 0.06648x_8 + 0.066488x_8 + 0.066488x_8 + 0.066488x_8 + 0.066488x_8 + 0.0
x_{26}
                                                                                            -0.969697x_1 -2.212121x_2 -0.424242x_{16} +5.060606x_4 +0.545455x_{21} -4.060606x_6 +0.757576x_7 +7.060606x_6
                         12.4242424242
x_{27}
                        1.18181818182
                                                                                          x_{13}
                        11.5454545455
                                                                                           -1.318182x_1 -2.772727x_2 +0.45454545x_{16} +0.863636x_4 -0.227273x_{21} -1.363636x_6 -1.954545x_7 +2.863636x_4 +2.863636x_5
x_{29}
                                                                                          -0.590909x_1 + 7.136364x_2 -0.727273x_{16} + 7.318182x_4 + 0.863636x_{21} - 2.818182x_6 + 6.227273x_7 + 6.663666x_{21} + 6.6636666x_{21} + 6.663666x_{21} + 6.66366x_{21} + 6.6636x_{21} + 6.66366x_{21} + 6.66366x_{21} + 6.66366x_{21} + 6.6636x_{21} +
                        11.7272727273
x_{30}
 x_9
                      0.878787878788
                                                                                          +1.227273x_1 -1.590909x_2 +0.818182x_{16} -4.045455x_4 -0.409091x_{21} +3.545455x_6 -5.318182x_7 +0.818182x_7 +0.818182x_7
 x_{32}
                        5.18181818182
                        12.3636363636
                                                                                            x_{33}
                                                                                           7.63636363636
```

 $x_4$  enters and  $x_{20}$  leaves

```
19.2472647702
                                                                                                                                                                                                                      x_{14}
                                                                                                                                                                                                                      +2.792123x_1 -3.690372x_2 +0.764770x_{16} -0.007659x_{20} -0.057987x_{21} +2.469365x_6 -0.959519x_7 +0.007659x_{20} -0.007659x_{20} -0.007659x_{21} +0.007659x_{21} +0.007659x_{21} +0.007659x_{22} +0.007659x_{21} +0.007659x_{22} +0.007659x_{22} +0.007659x_{21} +0.007659x_{22} +0.007659x_{22} +0.007659x_{22} +0.007659x_{23} +0.007659x_{24} +0.007659x_{24} +0.007659x_{25} +0.007650x_{25} +0.007650x_{25} +0.007650x_{25} +0.007650x_{25} +0.007650x_{25} +0.00760x_{25} +
x_{15}
                                                           1.25054704595
                                                                                                                                                                                                                      -1.582057x_1 - 1.233042x_2 - 0.158643x_{16} - 0.121444x_{20} - 0.062363x_{21} + 0.014223x_6 + 0.213348x_7 - 0.062363x_{21} + 0.014223x_6 + 0.01422x_6 + 0.01422x_6 + 0.0142x_6 + 0.014x_6 +
                                                           3.40153172867
  x_3
x_{17}
                                                           18.9398249453
                                                                                                                                                                                                                      +1.468271x_1 +2.149891x_2 +0.871991x_{16} +0.233042x_{20} +0.335886x_{21} +2.432166x_6 -1.517505x_7 +8
                                                           4.66192560175
 x_{18}
                                                           18.9879649891
                                                                                                                                                                                                                      x_{19}
                                                                                                                                                                                                                    x_4
                                                 0.0765864332604
  x_5
                                                           1.10831509847
                                                                                                                                                                                                                      +0.840263x_1 +0.806346x_2 -0.075492x_{16} -0.016411x_{20} +0.018600x_{21} -0.565646x_6 +0.515317x_7 +0.018600x_{21} +0.01860
                                                                                                                                                                                                                      11.5415754923
 x_{22}
                                                           7.91903719912
                                                                                                                                                                                                                      +2.765864x_1 +3.175055x_2 -0.185996x_{16} -0.866521x_{20} +0.582057x_{21} +1.533917x_6 +5.008753x_7 +0.008753x_7 +0.008750x_7 +0.0087
 x_{23}
                                                                                                                                                                                                                      6.35995623632
 x_{24}
                                                                                                                                                                                                                      +0.065646x_1 - 3.413567x_2 - 0.873085x_{16} - 0.102845x_{20} - 0.350109x_{21} - 4.411379x_6 + 0.829322x_7 - 6.66666x_7 - 0.008666x_7 - 0.00866x_7 
                                                           10.0787746171
 x_{25}
                                                                                                                                                                                                                      6.78446389497
x_{26}
                                                           12.8118161926
                                                                                                                                                                                                                      -1.490153x_1 - 5.512035x_2 - 0.080963x_{16} - 0.365427x_{20} - 0.052516x_{21} - 0.461707x_6 - 0.925602x_7 + 3
 x_{27}
                                                           1.40809628009
                                                                                                                                                                                                                      +0.923414x_1 + 0.482495x_2 + 0.018600x_{16} - 0.213348x_{20} + 0.241794x_{21} + 0.646608x_6 + 0.699125x_7 + 10.018600x_{16} + 0.018600x_{16} + 0.018600x_{16}
 x_{13}
                                                           11.6115973742
                                                                                                                                                                                                                      -1.407002x_1 - 3.335886x_2 + 0.513129x_{16} - 0.062363x_{20} - 0.329322x_{21} - 0.749453x_6 - 2.241794x_7 + 1.0666x_7 + 0.0666x_7 + 0.06
x_{29}
                                                                                                                                                                                                                      12.2877461707
 x_{30}
                                                      0.817286652079
                                                                                                                                                                                                                      -0.568928x_1 + 0.084245x_2 + 0.066740x_{16} + 0.057987x_{20} - 0.132385x_{21} - 0.268053x_6 - 0.020788x_7 + 0.066740x_{16} + 0.06740x_{16} +
    x_9
                                                                                                                                                                                                                      +1.643326x_1 +1.047046x_2 +0.543764x_{16} +0.292123x_{20} +0.068928x_{21} +0.668490x_6 -3.972648x_7 +3.048648x_7 +3.0486
 x_{32}
                                                           4.87199124726
                                                           12.7778993435
                                                                                                                                                                                                                      -3.601751x_1 + 0.791028x_2 + 0.003282x_{16} - 0.390591x_{20} + 0.042670x_{21} + 0.937637x_6 + 1.064551x_7 + 1.06
x_{33}
                                                           7.75820568928
                                                                                                                                                                                                                      z
```

 $x_7$  enters and  $x_4$  leaves

```
19.7763157895
                                                                                                                                                                                                                                      -6.671053x_1 - 4.552632x_2 + 0.144737x_{16} - 0.960526x_{20} - 1.026316x_{21} + 6.065789x_6 - 6.907895x_4
x_{14}
                                                                                                                                                                                                                                  1.02960526316
x_{15}
   x_3
                                                             3.45065789474
                                                                                                                                                                                                                                      -1.648026x_1 - 1.651316x_2 - 0.115132x_{16} - 0.167763x_{20} - 0.138158x_{21} + 0.470395x_6 - 0.641447x_4
                                                             18.0296052632
                                                                                                                                                                                                                                    -0.911184x_1 + 2.190789x_2 - 0.430921x_{16} + 0.200658x_{20} + 1.282895x_{21} - 1.582237x_6 + 11.884868x_4 + 11.884868x_5 + 
 x_{17}
                                                                                                    4.3125
                                                                                                                                                                                                                                    +1.937500x_1 +5.125000x_2 +0.562500x_{16} +0.562500x_{20} +0.875000x_{21} \\ -0.812500x_6 \\ +4.562500x_4 +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} \\ +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} \\ +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} \\ +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} +0.562500x_{10} \\ +0.562500x_{10} +0.56200x_{10} +0.56200x_{10} \\ +0.562500x_{10} +0.56200x_{10} +0.56200x_{10} \\ +0.562500x_{10} +0.56200x_{10} +0.56200x_{10} \\ +0.56200x_{10} +0.56200x_{10} +0.
 x_{18}
                                                                                                                                                                                                                                      19.5888157895
   x_{19}
                                                       0.230263157895
                                                                                                                                                                                                                                    -0.309211x_1 - 1.960526x_2 + 0.203947x_{16} - 0.217105x_{20} - 0.355263x_{21} + 2.138158x_6 - 3.006579x_4
   x_7
                                                                                                                                                                                                                                    +0.680921x_1 - 0.203947x_2 + 0.029605x_{16} - 0.128289x_{20} - 0.164474x_{21} + 0.536184x_6 - 1.549342x_4
   x_5
                                                            1.22697368421
                                                             10.7532894737
                                                                                                                                                                                                                                      -3.740132x_1 + 3.743421x_2 - 1.075658x_{16} + 0.661184x_{20} + 0.309211x_{21} - 5.148026x_6 + 10.292763x_4 + 10.292763x_6 + 10.29276x_6 + 10.20276x_6 + 10.20276x
 x_{22}
x_{23}
                                                            9.07236842105
                                                                                                                                                                                                                                  +1.217105x_1 - 6.644737x_2 + 0.835526x_{16} - 1.953947x_{20} - 1.197368x_{21} + 12.243421x_6 - 15.059211x_4 - 12.043421x_6 - 12.04421x_6 - 12.044421x_6 - 
                                                             6.16118421053
                                                                                                                                                                                                                                    x_{24}
                                                                                                                                                                                                                                    -0.190789x_1 -5.039474x_2 -0.703947x_{16} -0.282895x_{20} -0.644737x_{21} -2.638158x_6 -2.493421x_4 -2.638158x_6 -2.493421x_6 -2.4934
x_{25}
                                                               10.2697368421
                                                                                                                                                                                                                                  +4.496711x_1 - 4.414474x_2 + 1.108553x_{16} - 1.470395x_{20} - 0.269737x_{21} + 14.299342x_6 - 13.680921x_4 - 12.470395x_{20} - 12.47039
                                                               7.83223684211
x_{26}
                                                                                                                                                                                                                                    -1.203947x_1 - 3.697368x_2 - 0.269737x_{16} - 0.164474x_{20} + 0.276316x_{21} - 2.440789x_6 + 2.782895x_4 +
                                                               12.5986842105
x_{27}
                                                             1.56907894737
                                                                                                                                                                                                                                  +0.707237x_1 -0.888158x_2 +0.161184x_{16} -0.365132x_{20} -0.006579x_{21} +2.141447x_6 -2.101974x_4
x_{13}
                                                               11.0953947368
                                                                                                                                                                                                                                    -0.713816x_1 + 1.059211x_2 + 0.055921x_{16} + 0.424342x_{20} + 0.467105x_{21} - 5.542763x_6 + 6.740132x_4 + 0.055921x_{21} + 0.055921x_{22} + 0.055921x_{23} + 0.055921x_{24} + 0.055921x_{23} + 0.055921x_{24} + 0.055721x_{24} + 0.055721x_{24} + 0.05572x_{24} + 0.0572x_{24} + 0.0572x_{
 x_{29}
                                                                                                                                                                                                                                  -2.516447x_1 -5.072368x_2 +0.542763x_{16} -1.351974x_{20} -1.348684x_{21} +10.496711x_6 -11.404605x_4 -1.36186x_{21} +10.496711x_6 -11.404605x_4 -1.36186x_{21} +10.496711x_6 -1.36186x_{21} +10.496711x_6 -1.36186x_4 -1.36186x_5 -1.36
                                                             13.1611842105
   x_{30}
   x_9
                                                                                                                                                                                                                                      -0.562500x_1 + 0.125000x_2 + 0.062500x_{16} + 0.062500x_{20} - 0.125000x_{21} - 0.312500x_6 + 0.062500x_4 + 0.06
                                                                                                  0.8125
                                                                                                                                                                                                                                    +2.871711x_1 + 8.835526x_2 - 0.266447x_{16} + 1.154605x_{20} + 1.480263x_{21} - 7.825658x_6 + 11.944079x_4 + 1.184605x_{20} + 1.184605x_{20}
                                                             3.95723684211
   x_{32}
                                                               13.0230263158
                                                                                                                                                                                                                                      -3.930921x_1 - 1.296053x_2 + 0.220395x_{16} - 0.621711x_{20} - 0.335526x_{21} + 3.213816x_6 - 3.200658x_4 - 0.621711x_{20} + 0.62171x_{20} + 0.6217x_{20} + 0.6217x_{
x_{33}
                                                                                                                                                                                                                                    7.89802631579
```

 $x_{10}$  enters and  $x_7$  leaves

```
18.2272727273
                                                                                                               x_{14}
                                                                                                               x_{15}
                              2.83333333333
                                                                                                                -0.696970x_1 + 4.378788x_2 - 0.742424x_{16} + 0.500000x_{20} + 0.954545x_{21} - 6.106061x_6 + 8.606061x_4
                              2.74242424242
  x_3
x_{17}
                              18.7727272727
                                                                                                               -1.909091x_1 -4.136364x_2 +0.227273x_{16} -0.500000x_{20} +0.136364x_{21} +5.318182x_6 +2.181818x_4
                                                                                                              +1.136364x_1 +0.045455x_2 +1.090909x_{16}
                                                                                                                                                                                                                                                                                                                                                                                      -0.045455x_{21} +4.727273x_6 -3.227273x_4
                             4.90909090909
 x_{18}
                              20.7575757576
                                                                                                                x_{19}
                                                                                                              -0.712121x_1 - 4.515152x_2 + 0.469697x_{16} - 0.500000x_{20} - 0.818182x_{21} + 4.924242x_6 - 6.924242x_4 + 0.924242x_6 - 0.924242x_6 + 0.92424x_6 + 0.9244x_6 + 0.924x
                           0.530303030303
x_{10}
  x_5
                             1.62121212121
                                                                                                               +0.151515x_1 -3.560606x_2 +0.378788x_{16} -0.500000x_{20} -0.772727x_{21} +4.196970x_6 -6.696970x_4
                             9.33333333333
                                                                                                              x_{22}
                                                                                                                -2.409091x_1 - 29.636364x_2 + 3.227273x_{16} - 4.500000x_{20} - 5.363636x_{21} + 37.318182x_6 - 50.318182x_4
                               11.7727272727
 x_{23}
                                                                                                              -3.727273x_1 + 2.590909x_2 + 0.681818x_{16} + 0.500000x_{20} - 0.590909x_{21} - 0.045455x_6 + 0.545455x_4
                             6.31818181818
 x_{24}
                                                                                                              +0.924242x_1 +2.030303x_2 -1.439394x_{16} +0.500000x_{20} +0.636364x_{21} -10.348485x_6 +8.348485x_4
                             9.43939393939
 x_{25}
                                                                                                                x_{26}
                              12.1060606061
                              9.77272727273
                                                                                                              +2.590909x_1 + 20.363636x_2 - 2.772727x_{16} + 2.500000x_{20} + 4.636364x_{21} - 28.681818x_6 + 39.681818x_4 - 28.681818x_6 + 39.681818x_6 + 39.68188x_6 + 39.6818x_6 + 39.68188x_6 + 39.68
 x_{27}
                              2.24242424242
                                                                                                               -0.196970x_1 -6.621212x_2 +0.757576x_{16} -1.000000x_{20} -1.045455x_{21} +8.393939x_6 -10.893939x_4 +10.893939x_6 -10.893939x_6 +10.893939x_6 +10.893930x_6 +10.89300x_6 +10.8000x_6 +10.80
 x_{13}
                                                                                                              +2.242424x_1+19.803030x_2-1.893939x_{16}+2.500000x_{20}+3.863636x_{21}-25.984848x_6+35.484848x_4-25.00000x_{20}+3.863636x_{21}-25.984848x_6+35.484848x_4+35.484848x_4+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.484848x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.48484x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.4844x_6+35.484x_6+35.4844x_6+35.484x_6+35.4844x_6+35.4844x_6+35.484x_6+35.4844x_6+
                             8.89393939394
x_{29}
                                                                                                                -5.575758x_1 - 24.469697x_2 + 2.560606x_{16} - 3.500000x_{20} - 4.863636x_{21} + 31.651515x_6 - 41.151515x_4 + 31.651515x_6 - 41.151515x_6 + 41.1515x_6 + 
                              15.4393939394
 x_{30}
                                                                                                              0.348484848485
  x_9
                                                                                                                x_{32}
                             8.36363636364
                             10.7727272727
                                                                                                                x_{33}
                             8.1666666667
                                                                                                               -3.666667x_1 -4.833333x_2 -0.166667x_{16} -0.500000x_{20} -0.500000x_{21} -0.166667x_6 -5.333333x_4
      z
```

 $x_{28}$  enters and  $x_9$  leaves

```
17.6
                                                                                                                                                                                                                                 x_{14}
                                                          4.25714285714
                                                                                                                                                                                                                             +0.914286x_1 - 0.514286x_2 + 0.742857x_{16} + 0.542857x_{20} - 0.085714x_{21} - 1.714286x_6 + 4.342857x_4 + 5.342857x_{20} + 0.085714x_{21} - 1.0866x_{20} + 0.085714x_{21} + 0.085714x_{22} + 0.085714x_{21} + 0.085714x_{22} + 0.085714x_{22} + 0.085714x_{21} + 0.085714x_{22} + 
x_{15}
   x_3
                                                                                                                                                                                                                                 2.31428571429
                                                                                                                                                                                                                               -1.857143x_1 - 0.642857x_2 - 0.071429x_{16} - 0.071429x_{20} + 0.642857x_{21} + 1.357143x_6 + 7.428571x_4 + 2.66x_{10} +
                                                            19.0714285714
 x_{17}
                                                            5.02857142857
                                                                                                                                                                                                                               +1.157143x_1 + 1.442857x_2 + 0.971429x_{16} + 0.171429x_{20} + 0.157143x_{21} + 3.142857x_6 - 1.128571x_4 + 7.49x_{10} + 7.40x_{10} +
 x_{18}
                                                                                                                                                                                                                               -4.614286x_{1} - 1.685714x_{2} + 0.157143x_{16} - 0.442857x_{20} - 0.114286x_{21} + 0.214286x_{6} - 4.042857x_{4} + 1.966x_{10} + 0.042857x_{10} + 0.04287x_{10} + 0.04287x_{10} + 0.04287x_{10} + 0.04287x_{10} + 0.04287x_{10} 
                                                          21.8428571429
 x_{19}
                                                     0.928571428571
                                                                                                                                                                                                                               -0.642857x_1 + 0.142857x_2 + 0.071429x_{16} + 0.071429x_{20} - 0.142857x_{21} - 0.357143x_6 + 0.071429x_4 + 0.571429x_4 + 0.071429x_4 + 0.071420x_4 + 0.07
 x_{10}
                                                                                                                                                                                                                                 x_5
                                                                                                                  1.9
                                                          8.12857142857
                                                                                                                                                                                                                               -2.042857x_1 + 1.742857x_2 - 1.128571x_{16} + 0.271429x_{20} + 0.457143x_{21} - 2.357143x_6 + 7.671429x_4 - 1.4857x_1 + 0.271429x_2 + 0.457143x_{21} - 2.357143x_6 + 7.671429x_4 - 1.4857x_1 + 0.271429x_2 + 0.457143x_2 + 0.271429x_3 + 0.457143x_4 + 0.271429x_4 + 0.271429x_4 + 0.457143x_4 + 0.271429x_4 + 0.271427x_4 + 0.271
x_{22}
                                                                                                                                                                                                                             x_{23}
                                                             14.3714285714
                                                            6.55714285714
                                                                                                                                                                                                                               -3.685714x_1 + 5.385714x_2 + 0.442857x_{16} + 0.842857x_{20} - 0.185714x_{21} - 3.214286x_6 + 4.742857x_4 + 0.442857x_{20} + 0.442857x_{20} - 0.185714x_{21} - 0.442857x_{20} + 0.442857x_{20} 
x_{24}
                                                                                                                                                                                                                               x_{25}
                                                            8.97142857143
                                                                                                                                                                                                                                 15.8
x_{26}
                                                                                                                                                                                                                             +2.242857x_1 -3.042857x_2 -0.771429x_{16} -0.371429x_{20} +1.242857x_{21} -2.142857x_6 +4.528571x_4 +5.5367x_1 -2.142857x_2 +2.5367x_2 +2.536
                                                             7.77142857143
x_{27}
                                                                                                                  2.8
                                                                                                                                                                                                                                 x_{13}
                                                          7.17142857143
                                                                                                                                                                                                                             +1.942857x_1 - 0.342857x_2 - 0.171429x_{16} + 0.028571x_{20} + 0.942857x_{21} - 3.142857x_6 + 5.228571x_4 + 4.7367x_1 + 4.7367x_2 + 4.7367x_3 + 4.7367x_4 + 4.7367x_3 + 4.7367x_4 + 4.7367x_3 + 4.7367x_4 + 4.73
 x_{29}
                                                                                                                                                                                                                               17.6
 x_{30}
x_{28}
                                                     0.328571428571
                                                                                                                                                                                                                             +0.057143x_1 +3.842857x_2 -0.328571x_{16} +0.471429x_{20} +0.557143x_{21} -4.357143x_6 +5.771429x_4 +4.771429x_5 +0.057143x_1 +3.842857x_2 -0.328571x_{16} +0.471429x_2 +0.557143x_{21} -4.357143x_6 +5.771429x_4 +4.771429x_5 +0.057143x_5 +0.057144x_5 +0.05714x_5 +0.05
                                                                                                                                                                                                                               -2.614286x_1 + 0.314286x_2 + 1.157143x_{16} + 0.557143x_{20} - 1.114286x_{21} + 0.214286x_6 - 2.042857x_4 + 3.9666x_2 + 0.04286x_3 + 0.04286x_4 + 0.04286x_4 + 0.04286x_5 + 
                                                            10.8428571429
x_{32}
                                                          9.42857142857
                                                                                                                                                                                                                                 x_{33}
                                                                                                                                                                                                                                 8.38571428571
```

 $x_7$  enters and  $x_{32}$  leaves

```
-6.388393x_1 + 1.502976x_2 + 0.147321x_{16} - 0.040179x_{20} - 0.419643x_{21} + 0.138393x_6 + 0.980655x_4 + 5.138393x_6 + 0.980655x_4 + 0.040179x_{20} + 0.04017776x_{20} + 0.0401776x_{20} + 0.0401776x_{20} + 0.0401776x_{20} + 0.040176x_{20} +
                                                                     24.6026785714
x_{14}
 x_{15}
                                                                       5.16071428571
                                                                                                                                                                                                                                                                    +0.696429x_1 - 0.488095x_2 + 0.839286x_{16} + 0.589286x_{20} - 0.178571x_{21} - 1.696429x_6 + 4.172619x_4 + 5.488095x_2 + 0.839286x_{16} + 0.589286x_{20} - 0.178571x_{21} - 1.696429x_6 + 4.172619x_4 + 5.488095x_2 + 0.839286x_{20} - 0.178571x_{21} - 1.696429x_6 + 4.172619x_4 + 5.488095x_2 + 0.839286x_{20} - 0.178571x_{21} - 1.696429x_6 + 4.172619x_4 + 5.488095x_2 + 0.839286x_{20} - 0.178571x_{21} - 1.696429x_6 + 4.172619x_4 + 5.488095x_2 + 0.839286x_2 + 0.839
                                                                                                                                                                                                                                                                    -1.098214x_1 - 0.589286x_2 - 0.169643x_{16} - 0.044643x_{20} + 0.089286x_{21} - 0.401786x_6 + 0.830357x_4 + 0.5866x_6 + 0.830357x_4 + 0.5866x_6 + 0.830357x_6 + 0.83057x_6 + 0.
                                                                     3.66964285714
     x_3
 x_{17}
                                                                     15.6830357143
                                                                                                                                                                                                                                                                    +2.191964x_1+1.318452x_2+0.513393x_{16}-0.049107x_{20}+0.598214x_{21}+3.058036x_6-0.319940x_4+5.8x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058036x_{10}+3.058
                                                              0.736607142857
   x_{18}
                                                                                                                                                                                                                                                                      -5.267857x_1 - 1.607143x_2 + 0.446429x_{16} - 0.303571x_{20} - 0.392857x_{21} + 0.267857x_6 - 4.553571x_4 + 2.967857x_1 + 0.267857x_2 + 0.267857x_3 + 0.267857x_4 + 0.267857x_3 + 0.267857x_4 + 0.267857x_3 + 0.267857x_4 + 0.26787x_4 + 0.2677x_4 + 0.2677x_4 + 0.2677x_4 + 0.2677x_4 + 0.2677x_4 + 0.2677x_4 + 0.2677x_4
                                                                     24.5535714286
   x_{19}
                                                                                                                                                                                                                                                                  -0.642857x_1 + 0.142857x_2 + 0.071429x_{16} + 0.071429x_{20} - 0.142857x_{21} - 0.357143x_6 + 0.071429x_4 + 0.537143x_6 + 0.071429x_4 + 0.071420x_4 + 0.07
                                                                0.928571428571
   x_{10}
     x_5
                                                                                                                                                                                                                                                                  1.67410714286
                                                                                                                                                                                                                                                                  6.32142857143
   x_{22}
                                                                                                                                                                                                                                                                      -3.754464x_1 + 0.973214x_2 + 1.424107x_{16} - 0.388393x_{20} - 1.723214x_{21} + 3.004464x_6 - 6.075893x_4 + 1.6666x_1 + 1.6666x_2 + 1.6666x_3 + 1.6666x_4 + 1.6666x_3 + 1.6666x_4 + 1.66
                                                                       21.8258928571
 x_{23}
                                                                                                                                                                                                                                                                  -4.066964x_1 + 5.431548x_2 + 0.611607x_{16} + 0.924107x_{20} - 0.348214x_{21} - 3.183036x_6 + 4.444940x_4 + 0.924107x_{20} 
                                                                       8.13839285714
   x_{24}
                                                                                                                                                                                                                                                                  +0.352679x_1 - 3.383929x_2 - 0.754464x_{16} - 0.066964x_{20} - 0.366071x_{21} - 4.102679x_6 - 0.254464x_4 - 5.766071x_{21} - 0.066964x_{20} 
                                                                       11.0044642857
   x_{25}
                                                                                                                                                                                                                                                                      x_{26}
                                                                                                                 22.125
                                                                     9.35267857143
                                                                                                                                                                                                                                                                  x_{27}
                                                                                                                                                                                                                                                                    3.47767857143
 x_{13}
                                                                     6.26785714286
                                                                                                                                                                                                                                                                  +2.160714x_1 - 0.369048x_2 - 0.267857x_{16} - 0.017857x_{20} + 1.035714x_{21} - 3.160714x_6 + 5.398810x_4 + 4.46x_1 + 4.46x_2 + 4.46x_1 + 4.46x_2 + 4.46x_2 + 4.46x_3 + 4.46x_4 + 4.46x_2 + 4.46x_3 + 4.46x_4 + 4.46x_2 + 4.46x_3 + 4.46x_4 + 4.46x_3 + 4.46x_4 + 4.46x_3 + 4.46x_4 + 4.46x_4 + 4.46x_5 + 4.46x_
 x_{29}
 x_{30}
                                                                       23.4732142857
                                                                                                                                                                                                                                                                    -6.616071x_1 + 0.970238x_2 + 1.026786x_{16} - 0.098214x_{20} - 1.803571x_{21} + 3.116071x_6 - 4.306548x_4 - 1.206786x_{10} + 1.20676x_{10} + 1.20676x_{10} + 1.20676x_{10} + 1.20676x_{10} + 1.20676x_{10} + 1.2
                                                                       4.62053571429
                                                                                                                                                                                                                                                                    -0.977679x_1 + 3.967262x_2 + 0.129464x_{16} + 0.691964x_{20} + 0.116071x_{21} - 4.272321x_6 + 4.962798x_4 + 6.866726x_2 + 0.116071x_{21} - 4.962798x_4 + 0.116071x_{21} - 4.962798x_4 + 0.116071x_{22} - 4.96778x_4 + 0.116071x_{22} - 4.96778x_4 + 0.116077x_4 + 0.116077x_4 + 0.116077x_4 + 0.116077x_4 + 0.116077x_4 + 0.11607x_4 
   x_{28}
                                                                                                                                                                                                                                                                    x_7
                                                                       2.25892857143
                                                                     13.9464285714
                                                                                                                                                                                                                                                                      x_{33}
                                                                     8.61160714286
                                                                                                                                                                                                                                                                      -3.683036x_1 - 2.264881x_2 - 0.361607x_{16} - 0.174107x_{20} - 0.151786x_{21} - 3.066964x_6 - 1.528274x_4 - 0.2066x_6 - 0.1066666x_6 - 0.10666666x_6 - 0.10666666x_6 - 0.106666666x_6 - 0.106666666x_6 - 0.106666666x_6 - 0.106666666x_6 - 0.106666666x_6 - 0.10666666x_6 - 0.106666666x_6 - 0.10666666x_6 - 0.1066666x_6 - 0.106666x_6 - 0.1066
               z
```

 $x_{-1}$  enters and Final Dictionary Solution: 8.61160714286 Num Pivots: 9