```
4.0
       x_{15}
                              8.0
x_{16}
                              +3.000000x_4
   13.0
      +3.000000x_1 -2.000000x_2
                                             x_{17}
x_{18}
   1.0
       +1.000000x_1
                      +1.000000x_3
                                     -3.000000x_5 + 2.000000x_6 + 2.000000x_7
   8.0
       15.0
       -3.000000x_1 + 2.000000x_2 - 2.000000x_3
                                     -1.000000x_5 -1.000000x_6 -3.000000x_7 +1.000000x_8
x_{20}
      +3.000000x_1 + 2.000000x_2 + 2.000000x_3 - 2.000000x_4 + 2.000000x_5 - 1.000000x_6
   13.0
                                                            +2.000000x_8
x_{21}
                                     6.0
      +1.000000x_1 -2.000000x_2 +1.000000x_3
x_{22}
   5.0
                      -3.000000x_1
x_{23}
   2.0
       +1.000000x_1 - 1.000000x_2 - 1.000000x_3 + 3.000000x_4 - 3.000000x_5 - 1.000000x_6
x_{24}
   11.0
       x_{25}
                                     -3.000000x_5
                                                     -3.000000x_7 - 3.000000x_8 + 1.00
   5.0
       -2.000000x_1 + 1.000000x_2 - 1.000000x_3
x_{26}
                                             +3.000000x_6 -1.000000x_7
   14.0
       -1.000000x_1 + 1.000000x_2 + 2.000000x_3 + 3.000000x_4
x_{27}
                                             x_{28}
   8.0
       +2.000000x_1 -2.000000x_2 -1.000000x_3 -1.000000x_4
   8.0
       -2.000000x_1 + 2.000000x_2 - 2.000000x_3 - 2.000000x_4 + 3.000000x_5 + 1.000000x_6
                                                            +2.000000x_8
x_{29}
   0.0
              z
```

No initialization required –; Proceed to Optimize.

```
4.0
x_{15}
x_{16}
   8.0
                             13.0
      +3.000000x_1 -2.000000x_2
                             +3.000000x_4
                                             x_{17}
   1.0
                      +1.000000x_3
                                     -3.000000x_5 + 2.000000x_6 + 2.000000x_7
x_{18}
      +1.000000x_1
   8.0
       x_{19}
   15.0
      -3.000000x_1 + 2.000000x_2 - 2.000000x_3
                                     -1.000000x_5 -1.000000x_6 -3.000000x_7 +1.000000x_8
x_{20}
      +3.000000x_1 + 2.000000x_2 + 2.000000x_3 - 2.000000x_4 + 2.000000x_5 - 1.000000x_6
   13.0
                                                            +2.000000x_8
x_{21}
   6.0
      +1.000000x_1 -2.000000x_2 +1.000000x_3
                                     x_{22}
   5.0
                      -3.000000x_1
x_{23}
   2.0
      +1.000000x_1-1.000000x_2-1.000000x_3+3.000000x_4-3.000000x_5-1.000000x_6
x_{24}
      11.0
x_{25}
   5.0
      -2.000000x_1 + 1.000000x_2 - 1.000000x_3
                                     -3.000000x_5
                                                    -3.000000x_7 -3.000000x_8 +1.00
x_{26}
x_{27}
   14.0
      -1.000000x_1 + 1.000000x_2 + 2.000000x_3 + 3.000000x_4
                                             +3.000000x_6 -1.000000x_7
                                             8.0
      +2.000000x_1 -2.000000x_2 -1.000000x_3 -1.000000x_4
x_{28}
   8.0
      -2.000000x_1 + 2.000000x_2 - 2.000000x_3 - 2.000000x_4 + 3.000000x_5 + 1.000000x_6
                                                            +2.000000x_8
x_{29}
              0.0
```

 x_2 enters and x_{24} leaves

```
10.0
        x_{15}
    8.0
                                     +2.000000x_4 +2.000000x_5 -1.000000x_6 -1.000000x_7 +1.000000x_8 +
x_{16}
    9.0
        x_{17}
x_{18}
    1.0
        +1.000000x_1
                           +1.000000x_3
                                               -3.000000x_5 +2.000000x_6 +2.000000x_7
   10.0
        -2.000000x_1 -1.000000x_{24} -4.000000x_3
                                                        +1.000000x_6 -2.000000x_7 -2.0000000x_8 -
   19.0
        x_{20}
                                     +4.000000x_4 -4.000000x_5 -3.000000x_6
   17.0
        +5.0000000x_1 -2.0000000x_{24}
                                                                           +2.000000x_8
x_{21}
    2.0
        x_{22}
                           -2.000000x_3 -1.000000x_4 +3.000000x_5 -3.000000x_6 -1.000000x_7 -1.000000x_8 +
x_{23}
    5.0
        -3.000000x_1
    2.0
        +1.000000x_1 - 1.000000x_{24} - 1.000000x_3 + 3.000000x_4 - 3.000000x_5 - 1.000000x_6
x_2
        -2.000000x_1 + 1.000000x_{24} - 2.000000x_3
    9.0
                                               +6.000000x_5 -1.000000x_6 -3.000000x_7 -3.000000x_8 -3.0000000x_8
x_{25}
        7.0
x_{26}
                 -1.000000x_{24} + 1.000000x_3 + 6.000000x_4 - 3.000000x_5 + 2.000000x_6 - 1.000000x_7
   16.0
x_{27}
    4.0
                 +2.000000x_{24} +1.000000x_3 -7.000000x_4 +6.000000x_5
                                                                  +3.000000x_7 - 1.000000x_8 +
x_{28}
   12.0
                 -2.000000x_{24} - 4.000000x_3 + 4.000000x_4 - 3.000000x_5 - 1.000000x_6
                                                                           +2.000000x_8
x_{29}
                                     +2.000000x_4 -1.000000x_5 -3.000000x_6 -2.000000x_7 -1.000000x_8 +
    2.0
        +1.000000x_1 -1.000000x_{24}
```

 x_1 enters and x_{23} leaves

```
20.0
                                                                                                                                x_{15}
                                                                 8.0
                                                                                                                                                                                                                                                                                                                                                                x_{16}
x_{17}
                                  10.6666666667
                                                                                                                                x_{18}
                                 2.6666666667
                                                                                                                                                                                                                                                                                        +0.666667x_{23} - 1.000000x_{24} - 2.666667x_3 + 0.666667x_4 - 2.000000x_5 + 3.000000x_6 - 1.333333x_7 - 1.33x_7 -
                                 6.6666666667
 x_{19}
                                  17.3333333333
                                                                                                                               x_{20}
                                                                                                                               x_{21}
                                  25.3333333333
x_{22}
                              0.3333333333333
                                                                                                                              -0.666667x_3 -0.333333x_4 +1.000000x_5 -1.000000x_6 -0.333333x_7 -0.33333x_7 -0.333333x_7 -0.33333x_7 -0.3333x_7 -0.3333x_7 -0.3333x_7 -0.3333x_7 -0.3333x_7 -0.3333x_7 -0.3333x_7 -0.3333x_7 -0.333x_7 -0.33x_7 -0.30x_7 -0.00x_7 -0.00x
                                  1.66666666667
                                                                                                                                -0.333333x_{23}
  x_1
                                 3.66666666667
                                                                                                                                -0.333333x_{23} - 1.000000x_{24} - 1.666667x_3 + 2.666667x_4 - 2.000000x_5 - 2.000000x_6 - 0.333333x_7 - 0.33333x_7 - 0.333333x_7 - 0.33333x_7 - 0.3333x_7 - 0.3333x_7 - 0.3333x_7 - 0.3333x_7 - 0.333x_7 - 0.33x_7 - 0.30x_7 - 0.30x_7 - 0.30x_7 - 0.30x_7 - 0.
 x_2
                                                                                                                               +0.666667x_{23} + 1.000000x_{24} - 0.666667x_3 + 0.666667x_4 + 4.000000x_5 + 1.000000x_6 - 2.333333x_7 - 2.33x_7 -
                                 5.66666666667
 x_{25}
                                 5.33333333333
                                                                                                                              +0.333333x_{23} -1.000000x_{24} -1.3333333x_3 +3.333333x_4 -7.000000x_5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -2.666667x_7 - 2.66
 x_{26}
                                                                                                                                                                                                             -1.000000x_{24} + 1.000000x_3 + 6.000000x_4 - 3.000000x_5 + 2.000000x_6 - 1.000000x_7
 x_{27}
                                                              16.0
                                                               4.0
                                                                                                                                                                                                            +2.000000x_{24} +1.000000x_3 -7.000000x_4 +6.000000x_5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       +3.000000x_7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -1.00
x_{28}
                                                              12.0
                                                                                                                                                                                                           -2.000000x_{24} - 4.000000x_3 + 4.000000x_4 - 3.000000x_5 - 1.000000x_6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              +2.00
 x_{29}
                                  3.66666666667
                                                                                                                             -0.333333x_{23} -1.000000x_{24} -0.666667x_3 +1.666667x_4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -4.000000x_6 - 2.333333x_7 - 1.33
       z
```

 x_4 enters and x_{22} leaves

```
20.5294117647
                                                                                                                                                                                                   x_{15}
                                                                                                                                                                                                   x_{16}
                                                      8.11764705882
                                                                                                                                                                                                   -0.529412x_{23} + 0.823529x_{24} - 0.823529x_3 + 0.588235x_{22} + 2.882353x_5 - 4.941176x_6 + 1.058824x_7 + 3.0666x_7 + 1.0686x_7 + 1.0666x_7 + 1.06
                                                      10.4705882353
x_{17}
x_{18}
                                                      2.64705882353
                                                                                                                                                                                                   -0.352941x_{23} - 0.117647x_{24} + 0.117647x_3 + 0.058824x_{22} - 2.411765x_5 + 0.705882x_6 + 1.705882x_7 - 0.06882x_7 + 0.06882x_7 +
                                                                                                                                                                                                   6.70588235294
 x_{19}
                                                      17.7058823529
                                                                                                                                                                                                   x_{20}
                                                                                                                                                                                                   25.4705882353
 x_{21}
  x_4
                                            0.0588235294118
                                                                                                                                                                                                 1.64705882353
    x_1
  x_2
                                                                                                                                                                                                   -0.176471x_{23} - 0.058824x_{24} + 0.058824x_3 - 0.470588x_{22} + 1.294118x_5 + 0.352941x_6 - 0.647059x_7 - 1.0647058x_7 - 0.0647058x_7 - 0
                                                      3.82352941176
                                                                                                                                                                                                   5.70588235294
  x_{25}
                                                                                                                                                                                                   +0.529412x_{23} + 0.176471x_{24} + 0.823529x_3 - 0.588235x_{22} - 2.882353x_5 + 2.941176x_6 - 3.058824x_7 - 4.058235x_{23} + 0.05824x_7 - 4.058235x_{23} + 0.05824x_7 - 4.058235x_{23} + 0.05824x_7 - 4.058235x_{23} + 0.05824x_7 - 4.058235x_{23} + 0.058235x_{23} + 0.05825x_{23} + 0.05
                                                      5.52941176471
  x_{26}
                                                                                                                                                                                                   x_{27}
                                                      16.3529411765
                                                      3.58823529412
                                                                                                                                                                                                   -0.411765x_{23} - 0.470588x_{24} - 3.529412x_3 + 1.235294x_{22} - 2.647059x_5 - 6.176471x_6 + 3.823529x_7 + 2.647057x_5 - 6.176471x_6 + 3.823529x_7 + 2.647057x_5 + 2.64707x_5 + 
 x_{28}
                                                      12.2352941176
                                                                                                                                                                                                   +0.235294x_{23} - 0.588235x_{24} - 1.411765x_3 - 0.705882x_{22} + 1.941176x_5 + 2.529412x_6 - 0.470588x_7 + 0.235294x_7 + 0.235284x_7 + 0.23
  x_{29}
                                                      3.76470588235
                                                                                                                                                                                                   -0.235294x_{23} - 0.411765x_{24} + 0.411765x_3 - 0.294118x_{22} + 2.058824x_5 - 2.529412x_6 - 2.529412x_7 - 2.52
          z
```

 x_3 enters and x_{28} leaves

```
20.35
x_{15}
 9.43333333333
   x_{16}
   x_{17}
9.63333333333
x_{18}
 2.76666666667
   4.433333333333
   x_{19}
 18.4833333333
   x_{20}
 23.6166666667
   x_{21}
x_4
0.716666666667
   0.75
x_1
 3.88333333333
   x_2
   5.46666666667
x_{25}
6.3666666667
   x_{26}
   x_{27}
 21.3166666667
   1.01666666667
x_3
x_{29}
   10.8
 4.18333333333
   z
```

 x_5 enters and x_{18} leaves

```
27.2666666667
x_{15}
    x_{16}
 13.3066666667
    13.5066666667
x_{17}
 1.10666666667
    x_5
    4.98666666667
x_{19}
    17.6533333333
x_{20}
    29.4266666667
x_{21}
x_4
 1.54666666667
    2.133333333333
x_1
    x_2
 5.26666666667
                -2.000000x_{18} + 3.000000x_6 + 1.000000x_7 - 3
  11.0
    -0.000000x_{23} + 1.000000x_{24}
x_{25}
 2.49333333333
    x_{26}
    x_{27}
 22.1466666667
 0.186666666667
    x_3
  14.12
    x_{29}
    6.12
z
```

 x_9 enters and x_{19} leaves

```
30.3643292683
x_{15}
                                                                  16.8262195122
                                                                                                                                                                                                                                                    +0.083841x_{23} - 0.001524x_{24} + 0.028963x_{28} - 0.381098x_{22} - 1.541159x_{18} + 4.564024x_6 + 0.286585x_7 - 0.001524x_{24} + 0.001524x_{24} + 0.001524x_{25} + 0.001524x
x_{16}
 x_{17}
                                                                  17.7103658537
                                                                                                                                                                                                                                                    -0.193598x_{23} + 0.330793x_{24} + 0.714939x_{28} - 0.301829x_{22} - 1.568598x_{18} + 3.606707x_6 - 0.189024x_7 - 0.001829x_{23} + 0.001829x_{24} + 0.001829x_{25} - 0.001820x_{25} - 0.001820x
   x_5
                                                                  1.66158536585
                                                                                                                                                                                                                                                    -0.047256x_{23} - 0.108232x_{24} + 0.056402x_{28} - 0.057927x_{22} - 0.422256x_{18} + 1.045732x_6 + 0.347561x_7 - 0.047256x_{23} - 0.047256x_{23} - 0.047256x_{24} + 0.047256x_{25} - 0.047256x
                                                                0.57012195122
                                                                                                                                                                                                                                                    x_9
                                                                   14.8521341463
                                                                                                                                                                                                                                                    +0.224848x_{23} + 0.450457x_{24} - 0.558689x_{28} - 0.385671x_{22} + 0.412348x_{18} - 2.169207x_6 - 1.185976x_7 + 0.44676x_{18} + 0.44676x_{
   x_{20}
                                                                  32.5015243902
                                                                                                                                                                                                                                                  -1.535823x_{23} - 1.517530x_{24} + 0.833079x_{28} - 1.382622x_{22} - 2.223323x_{18} + 2.986280x_6 - 2.204268x_7 - 2.20468x_7 - 2.20468x_7 - 2.20468x_7 - 2.20468x_7 - 2.20468x_7 - 2.20466x_7 - 2.20
   x_{21}
   x_4
                                                                                                                                                                                                                                                  -0.012957x_{23} + 0.163872x_{24} - 0.113567x_{28} - 0.032012x_{22} - 0.325457x_{18} + 0.867378x_6 + 0.692073x_7 - 0.0012957x_{23} + 0.0012957x_{24} + 0.0012957x_{25} + 0.00127x_{25} + 0.00
                                                                   2.18140243902
                                                                                                                                                                                                                                                    2.68445121951
     x_1
                                                                       5.5137195122
                                                                                                                                                                                                                                                      -0.322409x_{23} - 0.157774x_{24} - 0.002287x_{28} - 0.443598x_{22} - 0.509909x_{18} + 0.876524x_6 + 0.161585x_7 - 0.002287x_{28} - 0.0002287x_{28} - 0.00027x_{28} - 0.00007x_{28} - 0
   x_2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -2.000000x_{18} + 3.000000x_6 + 1.000000x_7 -
                                                                                                                       11.0
                                                                                                                                                                                                                                                      -0.000000x_{23} + 1.000000x_{24}
   x_{25}
                                                                                                                         0.0
                                                                                                                                                                                                                                                      +0.500000x_{23} + 0.500000x_{24} - 0.500000x_{28} - 0.000000x_{22} + 1.500000x_{18} - 3.000000x_{6} - 3.000000x_{7} -
   x_{26}
                                                                       23.693597561
                                                                                                                                                                                                                                                        -0.049543x_{23} + 0.273628x_{24} - 1.198933x_{28} + 0.407012x_{22} - 0.362043x_{18} + 1.257622x_6 + 3.057927x_7 - 0.0049543x_{23} + 0.0049543x_{24} + 0.0049543x_{25} + 0.004954x_{25} + 0.004054x_{25} + 0.00404x_{25} + 0.00404x_{2
   x_{27}
                                                          0.730182926829
                                                                                                                                                                                                                                                +0.090701x_{23} - 0.147104x_{24} - 0.205030x_{28} + 0.224085x_{22} + 0.278201x_{18} - 1.071646x_6 + 0.155488x_7 + 0.000701x_{23} + 0.000701x
     x_3
                                                                12.8201219512
                                                                                                                                                                                                                                                    x_{29}
                                                                8.52591463415
                                                                                                                                                                                                                                                    z
```

 x_6 enters and x_{26} leaves

```
30.3643292683
                                                                                                                  -0.774898x_{23} + 0.597053x_{24} - 0.680894x_{28} - 1.946646x_{22} + 0.486280x_{18} - 2.073679x_{26} - 10.041159x_{7} + 0.041159x_{18} + 0.041156x_{18} + 0.041156x_{18} + 0.041156x_{18} + 0.041156x_{18} + 0.041156x_{18} + 0.041166x_{18} + 0.041166x_{18} + 0.04166x_{18} + 0.04
x_{15}
x_{16}
                               16.8262195122
                                                                                                                 +0.844512x_{23} + 0.759146x_{24} - 0.731707x_{28} - 0.381098x_{22} + 0.740854x_{18} - 1.521341x_{26} - 4.277439x_{7} - 4.277438x_{7} - 4.277
                                                                                                                 17.7103658537
x_{17}
 x_5
                              1.66158536585
                                                                                                                +0.127033x_{23} +0.066057x_{24} -0.117886x_{28} -0.057927x_{22} +0.100610x_{18} -0.348577x_{26} -0.698171x_{7}
                                                                                                                0.57012195122
  x_9
                               14.8521341463
                                                                                                                 x_{20}
                              32.5015243902
                                                                                                                x_{21}
 x_4
                               2.18140243902
                                                                                                                2.68445121951
  x_1
                                 5.5137195122
                                                                                                                  -0.176321x_{23} - 0.011687x_{24} - 0.148374x_{28} - 0.443598x_{22} - 0.071646x_{18} - 0.292175x_{26} - 0.714939x_{73} - 0.071646x_{18} - 0.07166x_{18} - 0.07166x_{18} - 0.07166x_{18} - 0.07166x_{18} - 0.07166x_{18} - 0.07166x_{18} - 0.07166x_
 x_2
                                                                                                                 +0.500000x_{23} + 1.500000x_{24} - 0.500000x_{28} - 0.000000x_{22} - 0.500000x_{18} - 1.000000x_{26} - 2.000000x_{7}
                                                       11.0
 x_{25}
                                                        0.0
                                                                                                                  +0.166667x_{23} + 0.166667x_{24} - 0.166667x_{28} - 0.0000000x_{22} + 0.500000x_{18} - 0.333333x_{26} - 1.000000x_{7}
  x_6
                                 23.693597561
                                                                                                                  x_{27}
                           0.730182926829
                                                                                                                 x_3
                             12.8201219512
                                                                                                                x_{29}
                             8.52591463415
                                                                                                                  +0.018801x_{23} - 0.670224x_{24} + 0.034553x_{28} - 0.504573x_{22} - 0.413110x_{18} - 0.255589x_{26} - 3.239329x_{7} + 0.018801x_{23} - 0.018801x_{24} + 0.0018801x_{25} - 0.001801x_{25} - 0.0018801x_{25} - 0.
      z
```

 x_{10} enters and x_6 leaves

```
30.3643292683
x_{15}
                 16.8262195122
                                                              x_{16}
                                                              x_{17}
                17.7103658537
x_5
                1.66158536585
                                                              +0.032520x_{23} -0.028455x_{24} -0.023374x_{28} -0.057927x_{22} -0.182927x_{18} -0.159553x_{26} -0.131098x_{7}
                0.57012195122
                                                              +0.117886x_{23} - 0.040650x_{24} + 0.055894x_{28} - 0.100610x_{22} + 0.024390x_{18} - 0.031504x_{26} - 0.490854x_{7} + 0.031504x_{26} - 0.03
 x_9
                 14.8521341463
                                                              x_{20}
                                                             32.5015243902
x_{21}
x_4
                                                             +0.022358x_{23} + 0.199187x_{24} - 0.148882x_{28} - 0.032012x_{22} - 0.219512x_{18} - 0.070630x_{26} + 0.480183x_{7}
                 2.18140243902
                                                              2.68445121951
 x_1
                  5.5137195122
                                                              -0.237805x_{23} - 0.073171x_{24} - 0.086890x_{28} - 0.443598x_{22} - 0.256098x_{18} - 0.169207x_{26} - 0.346037x_{7} - 0.086890x_{28} - 0.08680x_{28} - 0.0860x_{28} - 0.0860x_
x_2
                              11.0
                                                              x_{25}
                              0.0
                                                              x_{10}
                  23.693597561
                                                               -0.022358x_{23} + 0.300813x_{24} - 1.226118x_{28} + 0.407012x_{22} - 0.280488x_{18} - 0.054370x_{26} + 2.894817x_{7}
x_{27}
              0.730182926829
                                                             +0.176829x_{23} - 0.060976x_{24} - 0.291159x_{28} + 0.224085x_{22} + 0.536585x_{18} - 0.172256x_{26} - 0.361280x_{7}
 x_3
x_{29}
                12.8201219512
                                                              8.52591463415
                                                              z
```

 x_{14} enters and x_{10} leaves

```
30.3643292683
                                                                                                                                                -1.144986x_{23} + 0.226965x_{24} - 0.310806x_{28} - 1.946646x_{22} - 0.623984x_{18} - 1.333503x_{26} - 7.820630x_{7}
x_{15}
x_{16}
                                       16.8262195122
                                                                                                                                               17.7103658537
                                                                                                                                                x_{17}
  x_5
                                       1.66158536585
                                                                                                                                               -0.010840x_{23} - 0.071816x_{24} + 0.019986x_{28} - 0.057927x_{22} - 0.313008x_{18} - 0.072832x_{26} + 0.129065x_{7}
                                                                                                                                              +0.127371x_{23} - 0.031165x_{24} + 0.046409x_{28} - 0.100610x_{22} + 0.052846x_{18} - 0.050474x_{26} - 0.547764x_{7} + 0.052846x_{18} - 0.050474x_{26} - 0.0547764x_{7} + 0.052846x_{18} - 0.050474x_{26} - 0.0547764x_{7} + 0.052846x_{18} - 0.050474x_{26} - 0.0547764x_{7} + 0.052846x_{18} - 0.050474x_{26} - 0.054764x_{7} + 0.052846x_{18} + 0.052846x_
                                     0.57012195122
   x_9
                                       14.8521341463
                                                                                                                                                x_{20}
                                                                                                                                              -0.074526x_{23} - 0.056233x_{24} - 0.628218x_{28} - 1.382622x_{22} + 2.160569x_{18} - 2.922595x_{26} - 10.972053x_{7} - 10.97205x_{7} - 10.972
                                       32.5015243902
 x_{21}
  x_4
                                       2.18140243902
                                                                                                                                              -0.090786x_{23} + 0.086043x_{24} - 0.035738x_{28} - 0.032012x_{22} - 0.558943x_{18} + 0.155657x_{26} + 1.159045x_{7} + 0.032012x_{22} + 0.032012x_{23} + 0.032012x_{24} + 0.032012x_{25} + 0.03
                                                                                                                                                -0.128726x_{23} + 0.084688x_{24} + 0.096714x_{28} - 0.297256x_{22} + 0.095528x_{18} - 0.411755x_{26} - 1.951728x_{7} + 0.096714x_{28} - 0.09
                                       2.68445121951
   x_1
                                         5.5137195122
                                                                                                                                                -0.115176x_{23} + 0.049458x_{24} - 0.209519x_{28} - 0.443598x_{22} + 0.111789x_{18} - 0.414465x_{26} - 1.081809x_{7}
  x_2
                                                                                                                                                11.0
  x_{25}
                                                                       0.0
                                                                                                                                               x_{14}
                                         23.693597561
                                                                                                                                                x_{27}
                                  0.730182926829
                                                                                                                                              +0.079946x_{23} - 0.157859x_{24} - 0.194275x_{28} + 0.224085x_{22} + 0.245935x_{18} + 0.021511x_{26} + 0.220020x_{7}
   x_3
                                     12.8201219512
                                                                                                                                               +0.016260x_{23} - 0.142276x_{24} - 0.092480x_{28} - 0.850610x_{22} - 0.280488x_{18} - 0.578252x_{26} - 0.631098x_{7}
  x_{29}
                                     8.52591463415
                                                                                                                                               +0.399729x_{23} -0.289295x_{24} -0.346375x_{28} -0.504573x_{22} +0.729675x_{18} -1.017446x_{26} \\ -5.524898x_{7} -0.017446x_{26} -0.017446x_
        z
```

 x_{12} enters and x_4 leaves

```
26.1297730487
                                                                                                                                          x_{15}
                                    6.73526836824
                                                                                                                                          +0.138124x_{23} - 0.765237x_{24} + 0.559970x_{28} - 0.233012x_{22} - 0.052596x_{18} + 0.011314x_{26} - 2.880935x_{7} + 0.011314x_{26} - 0.0114x_{26} 
x_{16}
 x_{17}
                                     11.9425550542
                                                                                                                                          +0.066604x_{23} + 0.123443x_{24} + 0.789279x_{28} - 0.217186x_{22} - 0.030238x_{18} - 0.451882x_{26} - 3.374571x_{7} + 0.066604x_{23} + 0.066604x_{23} + 0.066604x_{24} + 0.06
  x_5
                                 0.752239208027
                                                                                                                                          +0.027005x_{23} - 0.107684x_{24} + 0.034885x_{28} - 0.044582x_{22} - 0.080005x_{18} - 0.137720x_{26} - 0.354098x_{7}
                                0.928277998518
                                                                                                                                         +0.112465x_{23} - 0.017038x_{24} + 0.040541x_{28} - 0.105866x_{22} - 0.038925x_{18} - 0.024918x_{26} - 0.357465x_{72} + 0.038925x_{18} - 0.024918x_{26} - 0.038925x_{18} - 0.004918x_{26} - 0.004818x_{26} - 0.0
   x_9
                                                                                                                                          10.6998451074
  x_{20}
                                                                                                                                         41.9294902014
  x_{21}
                                                                                                                                          -0.036097x_{23} + 0.034211x_{24} - 0.014210x_{28} - 0.012728x_{22} - 0.222237x_{18} + 0.061890x_{26} + 0.460839x_{7} + 0.001890x_{18} + 0.00180x_{18} + 0.00180x_{
x_{12}
                                    0.86733113341
                                     3.12061418277
                                                                                                                                          x_1
                                     5.27059061216
                                                                                                                                          x_2
                                                                                                                                          6.18149370328
 x_{25}
                                     1.54192201495
                                                                                                                                         x_{14}
                                                                                                                                           +0.127214x_{23} - 0.053404x_{24} - 1.015220x_{28} + 0.498215x_{22} + 0.984713x_{18} - 0.279682x_{26} + 0.247155x_{7}
 x_{27}
                                        17.478752778
                                      1.35174085797
                                                                                                                                         +0.054078x_{23} - 0.133342x_{24} - 0.204458x_{28} + 0.214964x_{22} + 0.086673x_{18} + 0.065863x_{26} + 0.550273x_{7} + 0.086673x_{18} + 0.065863x_{26} + 0.086673x_{18} + 0.065863x_{26} + 0.086673x_{18} + 0.08
   x_3
                                      12.7205199003
                                                                                                                                         +0.020405x_{23} - 0.146205x_{24} - 0.090848x_{28} - 0.849148x_{22} - 0.254967x_{18} - 0.585359x_{26} - 0.684019x_{7}
 x_{29}
                                      10.6579567648
                                                                                                                                           z
```

 x_{18} enters and x_{12} leaves

```
27.9290909091
                                                                                      x_{15}
x_{16}
                                          6.53
                                                                                      11.8245454545
x_{17}
 x_5
                                         0.44
                                                                                       +0.040000x_{23} - 0.120000x_{24} + 0.040000x_{28} - 0.040000x_{22} + 0.360000x_{12} - 0.160000x_{26} - 0.520000x_{7}
                                                                                      +0.118788x_{23} - 0.023030x_{24} + 0.043030x_{28} - 0.103636x_{22} + 0.175152x_{12} - 0.035758x_{26} - 0.438182x_{7}
                    0.776363636364
 x_9
                      10.0054545455
                                                                                       -0.124848x_{23} - 0.292121x_{24} + 0.072121x_{28} - 0.314545x_{22} + 0.800606x_{12} + 0.756970x_{26} - 0.452727x_{7} - 0.000606x_{12} + 0.000606x_{13} + 0.000606x_{14} + 0.000606x_{15} + 0.0006x_{15} + 0.000606x_{15} + 0.0006
 x_{20}
                      40.9336363636
                                                                                      x_{21}
                       3.90272727273
                                                                                      -0.162424x_{23} + 0.153939x_{24} - 0.063939x_{28} - 0.057273x_{22} - 4.499697x_{12} + 0.278485x_{26} + 2.073636x_{7} - 0.063939x_{24} - 0.063939x_{25} - 0.057273x_{22} - 0.063939x_{25} - 0.063930x_{25} - 0.06390x_{25} - 0.0630x_{25} - 0.000x_{25} - 0.000x_{
x_{18}
                                                                                      3.05727272727
 x_1
                                                                                       -0.133333x_{23} + 0.066667x_{24} - 0.216667x_{28} - 0.450000x_{22} - 0.783333x_{12} - 0.383333x_{26} - 0.850000x_{7}
 x_2
                                          5.95
                                                                                      0.592727272727
 x_{25}
                      1.30090909091
                                                                                      x_{14}
                                                                                      -0.032727x_{23} + 0.098182x_{24} - 1.078182x_{28} + 0.441818x_{22} - 4.430909x_{12} - 0.005455x_{26} + 2.289091x_{7} - 0.005455x_{12} + 0.005455x_{13} + 0.005455x_{14} + 0.005455x_{15} + 0.00545x_{15} + 0.0054x_{15} + 0.0054x_{
 x_{27}
                      21.3218181818
                                         1.69
                                                                                      x_3
                       11.7254545455
                                                                                      x_{29}
                       11.3736363636
                                                                                      z
```

 x_{23} enters and x_1 leaves

```
5.80882352941
x_{15}
                       9.63865546218
                                                                                       -1.016807x_1 - 0.672269x_{24} + 0.655462x_{28} - 0.537815x_{22} + 0.310924x_{12} - 0.394958x_{26} - 4.773109x_7
x_{16}
x_{17}
                       13.3403361345
                                                                                       x_5
                       1.28781512605
                                                                                       3.29411764706
                                                                                       x_9
                       7.35924369748
                                                                                       +0.865546x_1 - 0.378151x_{24} - 0.006303x_{28} - 0.052521x_{22} + 0.737395x_{12} + 1.090336x_{26} + 1.065126x_{7} + 0.006303x_{28} + 0.00630x_{28} + 0.0060x_{28} + 0.000x_{28} + 0.00
 x_{20}
                                                                                       +2.949580x_1 - 0.016807x_{24} - 1.033613x_{28} - 0.613445x_{22} + 0.932773x_{12} - 1.184874x_{26} - 1.319328x_{7}
                       31.9159663866
 x_{21}
                                                                                       +1.126050x_1 + 0.042017x_{24} - 0.165966x_{28} + 0.283613x_{22} - 4.581933x_{12} + 0.712185x_{26} + 4.048319x_{7}
x_{18}
                     0.460084033613
                       21.1953781513
                                                                                       x_{23}
                       3.12394957983
                                                                                       x_2
                                                                                       5.06302521008
x_{25}
                       2.50840336134
                                                                                       -0.394958x_1 + 0.201681x_{24} - 0.096639x_{28} - 0.138655x_{22} + 0.306723x_{12} - 0.281513x_{26} - 0.668067x_{7} + 0.00668067x_{12} + 0.00668067x_{13} + 0.00668067x_{14} + 0.00668067x_{15} + 0.00667x_{15} + 0.0067x_{15} + 0.00667x_{15} + 0.0067x_{15} + 0.0067x_{15
x_{14}
                                                                                       +0.226891x_1 + 0.075630x_{24} - 1.098739x_{28} + 0.510504x_{22} - 4.447479x_{12} + 0.081933x_{26} + 2.686975x_{7}
x_{27}
                       20.6281512605
                       2.53781512605
                                                                                       x_3
x_{29}
                                                                                       -0.428571x_1 - 0.142857x_{24} - 0.035714x_{28} - 0.964286x_{22} + 1.178571x_{12} - 0.821429x_{26} - 1.964286x_7 - 0.035714x_{28} - 0.035714x
                       13.0357142857
                       17.3340336134
                                                                                       z
```

 x_6 enters and x_{25} leaves

```
0.319293478261
x_{15}
x_{16}
                                           12.2527173913
                                                                                                                                                                  -1.771739x_1 - 0.407609x_{24} + 0.926630x_{28} - 0.687500x_{22} + 3.692935x_{12} - 0.839674x_{26} - 7.747283x_{7} + 3.692935x_{12} + 3.692935x_{13} + 3.692935x_{14} + 3.692935x_{15} + 3.69275x_{15} + 3.69275x
                                                                                                                                                                  13.5054347826
x_{17}
  x_5
                                           1.85190217391
                                                                                                                                                                   -0.440217x_1 - 0.035326x_{24} + 0.123641x_{28} - 0.156250x_{22} + 1.110054x_{12} - 0.362772x_{26} - 1.648098x_{7}
                                                                                                                                                                  -1.880435x_1 + 0.429348x_{24} + 0.497283x_{28} - 0.562500x_{22} + 4.970109x_{12} - 0.975543x_{26} - 6.046196x_{72} + 0.046196x_{73} + 0.046196x_{74} + 0.04616x_{74} + 0.04616x_{7
                                          6.95380434783
   x_9
                                                                                                                                                                 0.438858695652
  x_{20}
                                                                                                                                                                  26.660326087
  x_{21}
                                             7.05027173913
                                                                                                                                                                  x_{18}
                                                                                                                                                                  -9.114130x_1 + 1.453804x_{24} + 1.411685x_{28} - 2.531250x_{22} + 10.278533x_{12} - 3.955163x_{26} - 20.751359x_{72} + 10.278533x_{72} + 10.27853x_{72} + 10.2785x_{72} 
                                             28.7486413043
 x_{23}
                                                                                                                                                                 x_2
                                             1.78940217391
                                                                                                                                                                  3.27445652174
   x_6
                                           3.36141304348
                                                                                                                                                                   -0.641304x_1 + 0.288043x_{24} - 0.008152x_{28} - 0.187500x_{22} + 1.410326x_{12} - 0.426630x_{26} - 1.638587x_{7} + 1.410326x_{12} + 0.426630x_{26} + 0.42660x_{26} +
 x_{14}
                                           21.3573369565
                                                                                                                                                                  +0.016304x_1 + 0.149457x_{24} - 1.023098x_{28} + 0.468750x_{22} - 3.504076x_{12} - 0.042120x_{26} + 1.857337x_{7} + 0.042120x_{12} + 0.042120x_{13} + 0.042120x_{14} + 0.042120x_{15} + 0.04212
  x_{27}
                                           1.46467391304
                                                                                                                                                                 +0.032609x_1 - 0.201087x_{24} - 0.296196x_{28} + 0.187500x_{22} - 1.758152x_{12} + 0.165761x_{26} + 1.464674x_{7} + 0.032609x_{12} + 0.032609x_{13} + 0.032609x_{14} + 0.032609x_{15} + 0.032600x_{15} + 0.03260
   x_3
                                           17.4796195652
                                                                                                                                                                  -1.711957x_1 + 0.307065x_{24} + 0.425272x_{28} - 1.218750x_{22} + 6.927989x_{12} - 1.577446x_{26} - 7.020380x_{7}
  x_{29}
                                           17.6779891304
                                                                                                                                                                  z
```

 x_{24} enters and x_{15} leaves

```
0.279097387173
x_{24}
                                       12.1389548694
                                                                                                                                                -4.914489x_1 + 0.356295x_{15} + 1.459620x_{28} - 0.899050x_{22} + 7.150831x_{12} - 1.628266x_{26} - 11.245843x_{7}
x_{16}
                                                                                                                                                +0.881235x_1 - 0.161520x_{15} + 0.611639x_{28} - 0.279097x_{22} - 1.181710x_{12} - 0.321853x_{26} - 2.908551x_{7}
 x_{17}
                                       13.5570071259
  x_5
                                     1.84204275534
                                                                                                                                                 -0.712589x_1 + 0.030879x_{15} + 0.169834x_{28} - 0.174584x_{22} + 1.409739x_{12} - 0.431116x_{26} - 1.951306x_{7}
                                     7.07363420428
                                                                                                                                               +1.429929x_1 - 0.375297x_{15} - 0.064133x_{28} - 0.339667x_{22} + 1.327791x_{12} - 0.144893x_{26} - 2.361045x_{7} + 0.064133x_{28} - 0.06413x_{29} + 0.06413x_{29} - 0.06414x_{29} - 
   x_9
                                  0.137767220903
                                                                                                                                                x_{20}
                                                                                                                                               +0.235154x_1 + 0.479810x_{15} - 0.861045x_{28} - 0.597387x_{22} - 1.210214x_{12} - 1.352732x_{26} - 0.051069x_{7}
                                     26.5071258907
  x_{21}
                                                                                                                                               +4.691211x_1 - 0.619952x_{15} - 0.409739x_{28} + 0.274347x_{22} - 2.072447x_{12} + 0.963183x_{26} + 2.637767x_{7}
x_{18}
                                       7.24821852732
                                        29.1543942993
                                                                                                                                               x_{23}
                                        1.74465558195
                                                                                                                                               x_2
                                                                                                                                               +1.610451x_1 - 0.289786x_{15} - 0.093824x_{28} - 0.015439x_{22} + 1.423990x_{12} + 0.084323x_{26} - 0.880048x_{7} + 0.084323x_{26} + 0.08432x_{26} + 0.08432x_{26} + 0.0842x_{26} + 0.084x_{26} + 
                                       3.36698337292
   x_6
                                       3.44180522565
                                                                                                                                                +1.579572x_1 - 0.251781x_{15} - 0.384798x_{28} - 0.038005x_{22} - 1.033254x_{12} + 0.130641x_{26} + 0.833729x_{7} + 0.038005x_{12} + 0.038005x_{13} + 0.038005x_{14} + 0.038005x_{15} + 0.03800
  x_{14}
                                                                                                                                                +1.168646x_1 - 0.130641x_{15} - 1.218527x_{28} + 0.546318x_{22} - 4.771971x_{12} + 0.247031x_{26} + 3.140143x_{7}
  x_{27}
                                       21.3990498812
                                       1.40855106888
                                                                                                                                                -1.517815x_1 + 0.175772x_{15} - 0.033254x_{28} + 0.083135x_{22} - 0.052257x_{12} - 0.223278x_{26} - 0.261283x_{7} + 0.083135x_{12} - 0.083257x_{12} - 0.083278x_{26} - 0.083183x_{7} + 0.083185x_{12} - 0.083278x_{12} - 0.083278x_{26} - 0.083186x_{12} + 0.083185x_{12} - 0.083185x_{12} - 0.083186x_{12} + 0.083186
   x_3
                                       17.5653206651
                                                                                                                                                +0.655582x_1 - 0.268409x_{15} + 0.023753x_{28} - 1.059382x_{22} + 4.323040x_{12} - 0.983373x_{26} - 4.384798x_{7}
 x_{29}
                                       17.6923990499
                                                                                                                                                -1.650831x_1 - 0.045131x_{15} - 0.248219x_{28} - 1.129454x_{22} - 0.675772x_{12} - 1.523753x_{26} - 7.378860x_{7} - 1.00867772x_{12} - 1.00867772x_{13} - 1.00867772x_{14} - 1.00867772x_{15} - 1.0086772x_{15} - 1.008772x_{15} - 1.008772x_{15} - 1.008772x_{15} - 1.008772x_{15} - 1.008772x_{15} - 1.008772x_{15} - 1.00872x_{15} - 1.0
        z
```

 x_{13} enters and x_{20} leaves

```
3.17261904762
                                                                                                                                                                                                                 -106.833333x_1 + 18.931548x_{15} + 13.110119x_{28} - 4.020833x_{22} + 11.172619x_{12} + 5.726190x_{26} + 1.84821x_{15} + 1.01019x_{15} + 1.01018x_{15} + 1.0
x_{24}
x_{16}
                                                      9.02976190476
                                                                                                                                                                                                                 +118.166667x_1 - 20.925595x_{15} - 14.032738x_{28} + 3.979167x_{22} - 13.970238x_{12} - 5.702381x_{26} - 4.00892
                                                                                                                                                                                                                          -4.166667x_1 \quad +0.711310x_{15} \quad +1.247024x_{28} \quad -0.479167x_{22} \quad -0.315476x_{12} \quad -0.154762x_{26} \quad -3.20535x_{12} \quad -0.15476x_{13} \quad -0.154762x_{26} \quad -0.15476x_{26} \quad -0.15476x_{26}
                                                        13.6845238095
x_{17}
                                                      1.39880952381
                                                                                                                                                                                                                    +16.833333x_1 -3.002976x_{15} -2.038690x_{28} +0.520833x_{22} -1.601190x_{12} -1.011905x_{26} -0.91964
   x_5
                                                                                                                                                                                                                      -17.333333x_1 + 2.869048x_{15} + 2.297619x_{28} - 1.083333x_{22} + 4.547619x_{12} + 0.476190x_{26} - 3.46428
                                                      7.54761904762
    x_9
                                                  0.345238095238
                                                                                                                                                                                                                    -13.666667x_1 + 2.363095x_{15} + 1.720238x_{28} - 0.541667x_{22} + 2.345238x_{12} + 0.452381x_{26} - 0.80357x_{12} + 0.452381x_{26} + 0.80357x_{15} + 0.8037x_{15} + 0.803
   x_{13}
                                                                                                                                                                                                                   +56.833333x_1 -9.306548x_{15} -7.985119x_{28} +1.645833x_{22} -10.922619x_{12} -3.226190x_{26} +3.27678
                                                      25.0773809524
   x_{21}
                                                        8.68452380952
                                                                                                                                                                                                                    -52.166667x_1 +9.211310x_{15} +6.747024x_{28} -1.979167x_{22} +7.684524x_{12} +2.845238x_{26} -0.70535x_{26} +2.845238x_{26} +2.84528x_{26} +2.84528x_{2
x_{18}
                                                                                                                                                                                                                 -122.333333x_1 + 20.244048x_{15} + 15.172619x_{28} - 6.708333x_{22} + 19.297619x_{12} + 2.976190x_{26} - 15.58928x_{15} + 10.2080x_{15} + 10
                                                        32.2976190476
 x_{23}
                                                                                                                                                                                                                          -6.500000x_1 \quad +1.276786x_{15} \quad +0.598214x_{28} \quad -0.437500x_{22} \quad -0.089286x_{12} \quad +0.107143x_{26} \quad +0.52678x_{12} \quad +0.00000x_{12} \quad +0.00000x_{13} \quad +0.00000x_{14} \quad +0.00000x_{15} \quad +
                                                         1.91071428571
   x_2
                                                                                               3.875
                                                                                                                                                                                                                      -18.500000x_1 +3.187500x_{15} +2.437500x_{28} -0.812500x_{22} +4.875000x_{12} +0.750000x_{26} -2.06250
    x_6
                                                      4.21428571429
                                                                                                                                                                                                                      -29.000000x_1 +5.035714x_{15} +3.464286x_{28} -1.250000x_{22} +4.214286x_{12} +1.142857x_{26} -0.96428x_{26} +1.142857x_{26} +1.142857x_{26}
 x_{14}
                                                                                                                                                                                                                       x_{27}
                                                        22.4642857143
                                                  0.797619047619
                                                                                                                                                                                                                   +22.666667x_1 -4.005952x_{15} -3.077381x_{28} +1.041667x_{22} -4.202381x_{12} -1.023810x_{26} +1.16071
    x_3
                                                      18.6428571429
                                                                                                                                                                                                                      -42.000000x_1 + 7.107143x_{15} + 5.392857x_{28} - 2.750000x_{22} + 11.642857x_{12} + 0.428571x_{26} - 6.89285
   x_{29}
                                                                                                                                                                                                                          -4.166667x_1 +0.389881x_{15} +0.068452x_{28} -1.229167x_{22} -0.244048x_{12} -1.440476x_{26} -7.52678
                                                            17.755952381
            z
```

 x_{15} enters and x_3 leaves

```
6.94205052006
x_{24}
                                4.8632986627
                                                                                                               -0.235513x_1 + 5.223626x_3 + 2.042348x_{28} - 1.462110x_{22} + 7.981426x_{12} - 0.354383x_{26} - 10.072065x_{7} + 10.072065
x_{16}
                                                                                                               x_{17}
                             13.8261515602
 x_5
                          0.800891530461
                                                                                                              8.11887072808
  x_9
                          0.815750371471
                                                                                                              x_{13}
                                                                                                              +4.174591x_1 + 2.323180x_3 - 0.835810x_{28} - 0.774146x_{22} - 1.159733x_{12} - 0.847697x_{26} + 0.580238x_{7}
                             23.2243684993
 x_{21}
                                                                                                               -0.046805x_1 - 2.299406x_3 - 0.329123x_{28} + 0.416048x_{22} - 1.978455x_{12} + 0.491085x_{26} + 1.963596x_7 + 0.491085x_{26} + 0.401085x_{26} + 0.401085x_{26} + 0.401085x_{26} + 0.401085x_{26} + 0.401085x_{2
x_{18}
                             10.5185735513
                             36.3283803863
                                                                                                               x_{23}
                             2.16493313522
                                                                                                              x_2
                                                                                                               4.50965824666
  x_6
                             5.21693907875
                                                                                                               x_{14}
                                                                                                               -0.482912x_1 - 1.787519x_3 - 1.411590x_{28} + 0.736999x_{22} - 5.047548x_{12} - 0.187221x_{26} + 2.735513x_7
x_{27}
                             23.8900445765
                          0.199108469539
                                                                                                              +5.658247x_1 - 0.249629x_3 - 0.768202x_{28} + 0.260030x_{22} - 1.049034x_{12} - 0.255572x_{26} + 0.289747x_{7} + 0.249629x_{12} + 0.249629x_{13} + 0.249629x_{14} + 0.249629x_{15} + 0.249628x_{15} + 0.249628x_{15} + 0.24962x_{15} + 0.24662x_{15} + 0.24662
x_{15}
                                                                                                               -1.786033x_1 - 1.774146x_3 - 0.066865x_{28} - 0.901932x_{22} + 4.187221x_{12} - 1.387816x_{26} - 4.833581x_7 - 0.066865x_{28} - 0.001932x_{22} + 0.001932x_{22} + 0.001932x_{23} - 0.001932x_{24} - 0.001932x_{25} - 0.00172x_{25} - 0.
 x_{29}
                             20.0579494799
                             17.8335809807
                                                                                                               z
```

 x_{-1} enters and Final Dictionary Solution: 17.8335809807 Num Pivots: 16