```
10.0
      -3.000000x_1
                    -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
x_{14}
   6.0
      -2.000000x_1 + 2.000000x_2 + 1.000000x_3
                                  +2.000000x_5 +2.000000x_6
                                                       +2.000000x_8
x_{15}
   9.0
      -3.000000x_1 - 1.000000x_2 + 3.000000x_3 + 1.000000x_4 - 1.000000x_5
                                                +2.000000x_7 +3.000000x_8 +3.00
x_{16}
x_{17}
   13.0
      3.0
                                         -2.000000x_2 -3.000000x_3
x_{18}
             7.0
x_{19}
   15.0
      +1.000000x_1 +3.000000x_2
                           x_{20}
   4.0
      +1.000000x_1 -2.000000x_2 -3.000000x_3 -1.000000x_4
                                         -1.000000x_6 -2.000000x_7 +1.000000x_8
x_{21}
   10.0
             +2.000000x_2 +1.000000x_3 -3.000000x_4
                                         x_{22}
   11.0
      -3.000000x_1 + 3.000000x_2 - 1.000000x_3
                                  x_{23}
                           x_{24}
   4.0
      -3.000000x_1 - 2.000000x_2
                           12.0
      +1.000000x_1 +3.000000x_2
x_{25}
   10.0
      x_{26}
   6.0
      x_{27}
   10.0
      x_{28}
      -1.000000x_1 + 2.000000x_2 + 3.000000x_3 - 3.000000x_4 + 1.000000x_5
                                                +1.000000x_7 -2.000000x_8 +3.00
   14.0
x_{29}
                    -2.000000x_3 + 2.000000x_4 + 2.0000000x_5 - 1.0000000x_6
   14.0
      +1.000000x_1
                                                       +3.000000x_8 +3.00
x_{30}
   12.0
      x_{31}
                           x_{32}
   3.0
      +1.000000x_1 +2.000000x_2
   12.0
      +2.000000x_1 -2.000000x_2 +1.000000x_3
                                  +1.000000x_5 +1.000000x_6
                                                       +2.000000x_8 - 1.00
x_{33}
   0.0
      -2.000000x_1
                           -2.000000x_4
                                         -2.000000x_6
                                                       +1.000000x_8
z
```

No initialization required –; Proceed to Optimize.

```
-1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
   10.0
      -3.000000x_1
x_{14}
                                     +2.000000x_5 +2.000000x_6
   6.0
      -2.000000x_1 + 2.000000x_2 + 1.000000x_3
                                                            +2.000000x_8
x_{15}
      -3.000000x_1 - 1.000000x_2 + 3.000000x_3 + 1.000000x_4 - 1.000000x_5
x_{16}
   9.0
                                                     +2.000000x_7 +3.000000x_8 +3.00
      13.0
x_{17}
   3.0
              -2.000000x_2 -3.000000x_3
                                             x_{18}
              7.0
x_{19}
   15.0
      +1.000000x_1 +3.000000x_2
                              x_{20}
   4.0
      +1.000000x_1 -2.000000x_2 -3.000000x_3 -1.000000x_4
                                             -1.000000x_6 -2.000000x_7 +1.000000x_8
x_{21}
   10.0
              +2.000000x_2 +1.000000x_3 -3.000000x_4
                                             x_{22}
x_{23}
   11.0
      -3.000000x_1 + 3.000000x_2 - 1.000000x_3
                                     -3.000000x_1 - 2.000000x_2
                              4.0
x_{24}
   12.0
      +1.000000x_1 +3.000000x_2
                              x_{25}
   10.0
      -1.000000x_1 - 1.000000x_2 - 3.000000x_3 + 1.000000x_4 + 2.000000x_5 + 2.000000x_6 - 1.000000x_7
x_{26}
   6.0
      x_{27}
      10.0
x_{28}
      -1.000000x_1 + 2.000000x_2 + 3.000000x_3 - 3.000000x_4 + 1.000000x_5
                                                     +1.000000x_7 -2.000000x_8 +3.00
   14.0
x_{29}
                      -2.000000x_3 + 2.000000x_4 + 2.0000000x_5 - 1.0000000x_6
   14.0
      +1.000000x_1
                                                            +3.000000x_8 +3.00
x_{30}
      12.0
x_{31}
   3.0
                             +1.000000x_1 +2.000000x_2
x_{32}
                                     +1.000000x_5 +1.000000x_6 \\
   12.0
      +2.000000x_1 -2.000000x_2 +1.000000x_3
                                                            +2.000000x_8 - 1.00
x_{33}
   0.0
      -2.000000x_1
                              -2.000000x_4
                                             -2.000000x_6
                                                            +1.000000x_8
```

 x_8 enters and x_{24} leaves

```
10.0
     -3.000000x_1
                -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
x_{14}
  14.0
     x_{15}
  21.0
    x_{16}
  9.0
     +2.000000x_1 -1.000000x_2 -1.000000x_3 +1.000000x_4 +5.000000x_5
                                           +1.000000x_{24} -6
x_{17}
  15.0
     x_{18}
  3.0
     +3.000000x_1 +4.0000000x_2 -3.0000000x_3 -4.0000000x_4
                                -1.000000x_6 -3.000000x_7 +1.000000x_{24} -3.0000000x_{24}
x_{19}
  23.0
                     +7.000000x_4 - 7.000000x_5 - 1.000000x_6
     -5.000000x_1 -1.000000x_2
                                           -2.000000x_{24} +7
x_{20}
x_{21}
  8.0
     2.0
     x_{22}
x_{23}
  7.0
          4.0
     -3.000000x_1 -2.000000x_2
                     x_8
  20.0
                     -5.000000x_1 -1.000000x_2
x_{25}
  10.0
     x_{26}
  10.0
     -6.000000x_1 -4.000000x_2 +3.000000x_3
                           -1.000000x_5 -1.000000x_6 -2.000000x_7 -1.000000x_{24} +5
x_{27}
     14.0
x_{28}
     6.0
x_{29}
     26.0
x_{30}
  24.0
    x_{31}
x_{32}
  7.0
     -2.000000x_1
                     +3.000000x_4 - 4.000000x_5 - 3.000000x_6
                                           -1.000000x_{24} + 5
  20.0
     x_{33}
  4.0
     -5.000000x_1 -2.000000x_2
                           -2.000000x_5 - 4.000000x_6 + 1.000000x_7 - 1.000000x_{24} + 3.0000000x_{24}
z
```

 x_7 enters and x_{19} leaves

```
x_{14}
 10.0
          -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
 16.0
   x_{15}
x_{16}
 26.0
   +2.000000x_1 -1.000000x_2 -1.000000x_3 +1.000000x_4 +5.000000x_5
 9.0
                              +1.000000x_{24} - 0
x_{18}
 19.0
   +1.000000x_1 +1.333333x_2 -1.000000x_3 -1.333333x_4
 1.0
                      -0.333333x_6 -0.3333333x_{19} + 0.3333333x_{24} -
x_7
 23.0
   -5.000000x_1 - 1.000000x_2
              +7.000000x_4 - 7.000000x_5 - 1.000000x_6
                              -2.000000x_{24} +
x_{20}
   7.0
x_{21}
 3.0
   +7.000000x_1 + 7.333333x_2
              x_{22}
 9.0
   x_{23}
 5.0
   x_8
   19.0
x_{25}
 9.0
   x_{26}
   x_{27}
 8.0
 18.0
       x_{28}
 5.0
   x_{29}
 29.0
   x_{30}
 28.0
   x_{31}
              +3.000000x_4 - 4.000000x_5 - 3.000000x_6
                              -1.000000x_{24} + 5
 7.0
   -2.000000x_1
x_{32}
   x_{33}
 22.0
```

 x_9 enters and x_{22} leaves

```
10.0
                                 -3.000000x_1
                                                                                                         -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
x_{14}
                                 18.0
x_{15}
               29.5
                                 x_{16}
                6.0
                                 x_{17}
               22.0
                                 +2.000000x_1 + 4.666667x_2 - 7.000000x_3 - 7.666667x_4 - 2.000000x_5 - 3.666667x_6 - 1.666667x_{19} + 0.666667x_{24} - 1.666667x_{24} - 1.66667x_{24} - 1.66667x_{24} - 1.66667x_{24} - 1.66667x_{24} - 1.666667x_{24} - 1.66667x
 x_{18}
                 0.5
                                 x_7
               26.5
                                 +3.166667x_1 + 7.555556x_2
                                                                                                                                             x_{20}
x_{21}
                 9.0
                                 -1.388889x_4 + 0.666667x_5 + 1.1111111x_6 - 0.055556x_{19} + 0.388889x_{24} - 0.0666667x_5 + 0.066667x_5 + 0.06667x_5 + 0.0667x_5 + 0
                 0.5
                                 +1.166667x_1 +1.222222x_2
 x_9
x_{23}
                 6.0
                                 6.0
 x_8
                                 23.5
x_{25}
                                 11.0
 x_{26}
               11.5
                                 +0.166667x_1+1.888889x_2+5.000000x_3-7.055556x_4+3.666667x_5+7.444444x_6+0.277778x_{19}+1.055556x_{24}-1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.06667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.06667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.06667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.066667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.06667x_{10}+1.066
x_{27}
               16.5
                                 x_{28}
                                4.0
x_{29}
                                 33.5
x_{30}
               30.0
                                 x_{31}
                                                                                                                                             x_{32}
                9.5
                                 +3.8333333x_1 +6.1111111x_2
               23.5
                                 x_{33}
                                 z
```

 x_2 enters and x_{17} leaves

```
10.0
                                                                                                                                                                                                                       -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
x_{14}
                                 22.0
                                                                     x_{15}
x_{16}
                              35.42
                                                                     -3.766667x_1 - 0.986667x_{17} - 2.986667x_3 - 0.180000x_4 - 1.346667x_5 - 6.466667x_6 - 1.726667x_{19} + 0.073333x_{24} - 0.07333x_{24} - 0.07333x_{24} - 0.07333x_{24} - 0.07333x_{24} - 0.0733x_{24} - 0.0733x_{24} - 0.0733x_{24} - 0.0733x_{24} - 0.0733x_{24} - 0.073x_{24} - 
                                                                     -0.600000x_1 - 0.120000x_{17} - 0.120000x_3 + 1.120000x_4 + 0.120000x_5 - 0.800000x_6 + 0.040000x_{19} - 0.160000x_{24} + 0.040000x_{19} - 0
 x_2
                                0.72
                              25.36
                                                                      x_{18}
                                                                     0.58
  x_7
                              31.94
                                                                     x_{20}
                                8.68
                                                                     +1.933333x_1 + 0.053333x_{17} - 1.946667x_3 - 3.720000x_4 + 0.613333x_5 + 2.133333x_6 + 0.093333x_{19} + 0.293333x_{24} + 0.093333x_{19} + 0.09333x_{19} + 0.0933x_{19} + 0.000x_{19} + 0.000x_{19
 x_{21}
                                                                     +0.433333x_1 -0.146667x_{17} -0.146667x_3 -0.020000x_4 +0.813333x_5 +0.133333x_6 -0.006667x_{19} +0.193333x_{24} +0.000667x_{19} +0.00067x_{19} +0.00067x_{19} +0.00067x_{19} +0.00067x_{19} +0.00067x_{19} +0.00067x_{19} +0.00067x_{19} +0.00067x_{19} +0.
                                 1.38
  x_9
                                6.24
                                                                     x_{23}
                                7.28
                                                                     x_8
                                                                     29.74
x_{25}
                              12.84
                                                                     x_{26}
x_{27}
                              12.86
                                                                     -0.966667x_1 - 0.226667x_{17} + 4.773333x_3 - 4.940000x_4 + 3.893333x_5 + 5.933333x_6 + 0.353333x_{19} + 0.753333x_{24}
                                14.1
                                                                      x_{28}
                                   5.6
                                                                      +0.333333x_1 - 0.266667x_{17} + 3.733333x_3 - 0.400000x_4 + 3.933333x_5 + 0.333333x_6 + 0.533333x_{19} + 0.533333x_{24} + 0.533333x_{19} + 0.53333x_{19} + 0.5333x_{19} + 0.5333x_{19} + 0.5333x_{19} + 0.533x_{19} + 0.533x_{19} + 0.533x_{19} + 0.533x_{19} + 0.53x_{19} + 0.50x_{19} + 0.50x_{19} + 0.50x_{19} + 0.50x_{19} + 
 x_{29}
                              39.98
                                                                     x_{30}
                              34.48
                                                                     -7.066667x_1 - 0.746667x_{17} - 1.746667x_3 + 5.080000x_4 - 4.586667x_5 - 9.866667x_6 - 1.306667x_{19} - 1.106667x_{24} + 1.08667x_{19} - 1.
x_{31}
                                                                     13.9
x_{32}
x_{3\underline{3}}
                              23.74
                                                                     7.28
```

 x_{11} enters and x_7 leaves

```
10.0
                                                                                                                                                                                                  -3.000000x_1
                                                                                                                                                                                                                                                                                                                                                                                                                                                   -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
x_{14}
                                                                                                                                                                                                  -3.120482x_1 - 0.578313x_{17} + 5.048193x_3 + 0.807229x_4 + 5.662651x_5 + 7.493976x_6 + 1.144578x_{19} - 0.578313x_{17} + 5.048193x_3 + 0.807229x_4 + 5.662651x_5 + 7.493976x_6 + 1.144578x_{19} - 0.578313x_{17} + 5.048193x_3 + 0.807229x_4 + 5.662651x_5 + 7.493976x_6 + 1.144578x_{19} - 0.578313x_{17} + 5.048193x_3 + 0.807229x_4 + 5.662651x_5 + 7.493976x_6 + 1.144578x_{19} - 0.578313x_{17} + 5.048193x_3 + 0.807229x_4 + 5.662651x_5 + 7.493976x_6 + 1.144578x_{19} - 0.578313x_{17} + 0.048193x_{19} + 0.048176x_{19} 
                                                      18.156626506
x_{15}
                                                                                                                                                                                                  36.0
 x_{16}
                                                0.21686746988
                                                                                                                                                                                                 x_2
                                                                                                                                                                                                 -1.542169x_1 - 0.602410x_{17} - 10.783133x_3 - 1.867470x_4 - 3.518072x_5 - 12.277108x_6 - 2.349398x_{19} - 0.3467470x_4 - 3.518072x_5 - 12.277108x_6 - 2.34938x_{19} - 2.34700x_5 - 2
                                               27.2048192771
  x_{18}
                                                1.04819277108
                                                                                                                                                                                                  x_{11}
                                                                                                                                                                                                 -2.156627x_1 - 0.951807x_{17} - 4.337349x_3 + 6.349398x_4 - 3.638554x_5 - 4.457831x_6 - 1.012048x_{19} - 0.7386627x_1 - 0.012048x_{19} - 0.0
                                               33.9036144578
  x_{20}
                                                14.1445783133
                                                                                                                                                                                                 -0.265060x_1 - 0.072289x_{17} - 11.493976x_3 - 2.024096x_4 - 5.542169x_5 - 12.313253x_6 - 2.481928x_{19} - 0.364060x_1 - 0.064060x_2 - 0.064060x_3 - 0.064060x_3 - 0.064060x_4 - 0.064060x_3 - 0.064060x_4 - 0.064060x_3 - 0.064060x_4 - 0.064060x_4 - 0.064060x_5 - 0.06400x_5 - 0.06400x_5 - 0.06400x_5 - 0.06400x_5 - 0.06400x_5 - 0.064000x_5 - 0.06400x_5 - 0.06400
x_{21}
                                                                                                                                                                                                 x_9
                                                2.33734939759
                                                5.02409638554
                                                                                                                                                                                                  x_{23}
                                                                                                                                                                                                 -0.795181x_1 - 0.216867x_{17} - 1.481928x_3 - 0.072289x_4 - 0.626506x_5 - 1.939759x_6 - 0.445783x_{19} - 0.072289x_4 - 0.072289x_5 - 0.072289x_6 - 0.072280x_6 - 0.072280x_6 - 0.072280x_6 - 0.072280x_6 - 0.072280x_6 - 0.072280x_6 - 0.07228
                                                7.43373493976
    x_8
                                                                                                                                                                                                 33.2409638554
 x_{25}
                                                                                                                                                                                                  -0.879518x_1 - 0.421687x_{17} - 11.048193x_3 + 1.192771x_4 - 0.662651x_5 - 8.493976x_6 - 2.144578x_{19} + 0.562671x_5 - 1.048193x_5 - 1.04818x_5 - 1.04818x
  x_{26}
                                                     17.843373494
                                                17.6746987952
                                                                                                                                                                                                 -2.903614x_1 - 0.337349x_{17} - 3.638554x_3 - 3.445783x_4 - 1.530120x_5 - 6.795181x_6 - 1.915663x_{19} + 0.53663x_{19} + 0.53664x_{19} + 0.5
 x_{27}
                                                11.0602409639
                                                                                                                                                                                                 -0.277108x_1 + 0.469880x_{17} + 4.710843x_3 - 1.843373x_4 - 2.975904x_5 + 1.036145x_6 + 0.132530x_{19} + 0.036145x_6 + 0.032530x_{19} + 0.036145x_6 + 0.036145x_6 + 0.036145x_6 + 0.036145x_6 + 0.036145x_6 + 0.03614x_6 + 0.03614
 x_{28}
                                                                                                                                                                                                 -0.903614x_1 - 0.337349x_{17} - 1.638554x_3 + 0.554217x_4 + 0.469880x_5 - 7.795181x_6 - 0.915663x_{19} + 0.5663x_{19} + 0.56
                                                8.67469879518
x_{29}
                                                                                                                                                                                                 45.4096385542
 x_{30}
                                                32.3975903614
                                                                                                                                                                                                 x_{31}
                                                                                                                                                                                               +0.771084x_1 - 0.698795x_{17} + 1.891566x_3 + 2.433735x_4 + 1.759036x_5 + 1.638554x_6 + 0.674699x_{19} + 0.564696x_1 + 0.674699x_{19} + 0.67469x_{19} + 0.67469x_{19} + 0.67469x_{19} + 0.67469x_{19} + 0.67460x_{19} 
x_{32}
                                                12.3975903614
                                                                                             22.0
                                                                                                                                                                                                 x_{33}
                                                8.48192771084
                                                                                                                                                                                                 z
```

 x_{22} enters and x_2 leaves

```
10.0
                                                                   -3.000000x_1
                                                                                                                                                                                                                           -1.000000x_3 -3.000000x_4 -2.000000x_5 +1.000000x_6
x_{14}
                                                               11.0
x_{15}
x_{16}
                              36.0
                                                                  -4.000000x_1 -1.000000x_{17} -4.000000x_3 +0.000000x_4 -2.000000x_5 -8.000000x_6 -2.000000x_{19} -0.000000x_6
                                                                6.0
                              28.0
                                                                   x_{18}
                                3.0
                                                                  x_{11}
                                                                  -6.000000x_1 -2.000000x_{17} +3.000000x_3 +15.666667x_4 +3.000000x_5 +0.666667x_6 +1.666667x_{19} -1.666667x_5
                              36.0
x_{20}
                                                                x_{21}
                              20.0
                                4.0
                                                                  -3.000000x_1 - 1.000000x_{17} + 4.000000x_3 + 7.666667x_4 + 5.000000x_5 + 1.666667x_6 + 1.666667x_{19} - 0.666667x_5 + 1.666667x_6 + 1.666667x_{19} - 0.666667x_6 + 1.666667x_6 + 1.66667x_6 + 1.666667x_6 + 1.66667x_6 + 1.666667x_6 + 1.66667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.66667x_6 + 1.66667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.666667x_6 + 1.66667x_6 + 1.666667x_6 + 1.66667x_6 + 1.66667x_6 + 1.666667x_6 + 1.66667x_6 + 1.6
  x_9
                                9.0
                                                               -12.000000x_1 - 2.000000x_{17} + 13.000000x_3 + 21.333333x_4 + 11.000000x_5 + 6.333333x_6 + 5.333333x_{19} - 2.33333x_{19} + 5.333333x_{19} + 5.33333x_{19} + 5.33333x_{19} + 5.33333x_{19} + 5.33333x_{19} + 5.33333x_{19} + 5.33333x_{19} + 5.3333x_{19} + 5.3333x_{19} + 5.3333x_{19} + 5.3333x_{19} + 5.3333x_{19} + 5.333x_{19} + 5.333x_{19} + 5.333x_{19} + 5.33x_{19} + 5.33x_{1
x_{23}
                                7.0
                                                                  x_8
                                                                  -9.000000x_1 -3.000000x_{17} +7.000000x_3 +19.333333x_4 +13.000000x_5 +1.333333x_6 +3.33333x_{19} -2.33333x_{19} +1.333333x_{19} +1.33333x_{19} +1.33333x_{19} +1.33333x_{19} +1.33333x_{19} +1.33333x_{19} +1.33333x_{19} +1.3333x_{19} +1.3333x_{19} +1.3333x_{19} +1.333x_{19} +1.333x_{19} +1.33x_{19} +1.33x_{19} +1.33x_{19} +1.33x_{19} +1.33x_{19} +1.3x_{19} +1.3x_{1
                              37.0
x_{25}
                              25.0
                                                                x_{26}
x_{27}
                             21.0
                                                                  -9.000000x_1 -2.000000x_{17} +8.000000x_3 +11.333333x_4 +9.000000x_5 +1.333333x_6 +2.333333x_{19} -1.333333x_{19}
                               6.0
                                                                  +9.000000x_1 +3.000000x_{17} -13.000000x_3 -24.333333x_4 -19.000000x_5 -11.333333x_6 -6.333333x_{19} +2.333333x_{19} +2.33333x_{19} +2.333333x_{19} +2.33333x_{19} +2.3333x_{19} +2.3333x_{19} +2.3333x_{19} +2.3333x_{19} +2.3333x_{19} +2.3333x_{19} +2.3333x_{19} +2.333x_{19} +2.333x_{19} +2.33x_{19} +2.3x_{19} +
x_{28}
                              18.0
                                                                x_{29}
                              53.0
                                                               x_{30}
x_{31}
                              29.0
                                                                  -0.000000x_1 + 1.000000x_{17} - 10.000000x_3 - 10.666667x_4 - 13.000000x_5 - 12.666667x_6 - 4.666667x_{19} + 0.666667x_{19} + 0.66667x_{19} + 0.66667x_{19} + 0.66667x_{19} + 0.666667x_{19} + 0.66667x_{19} + 0.666667x_{19} + 0.66667x_{19} + 0.66667x_{19} + 0.66667x_{19} + 0.66667x_{19} + 0.66667x_{19} + 0.666667x_{19} + 0.6666
                               9.0
                                                                  x_{32}
x_{3\underline{3}}
                               16.0
                                                               +13.000000x_1 + 3.000000x_{17} - 19.000000x_3 - 29.666667x_4 - 18.000000x_5 - 10.666667x_6 - 7.666667x_{19} + 2.666667x_{19} + 2.66667x_{19} + 2.66667x_{19} + 2.66667x_{19} + 2.66667x_{19} + 2.666667x_{19} + 2.666667x_{19} + 2.66667x_{19} + 2.66667
                              10.0
```

 x_3 enters and x_{28} leaves

```
9.53846153846
                                                                                                                                                                                                             x_{14}
                                                                                                                                                                                                             -3.846154x_1 - 1.615385x_{17} + 1.538462x_{28} + 6.435897x_4 + 12.230769x_5 + 7.435897x_6 + 1.743590x_{19} - 6.435897x_6 + 1.743590x_{19} - 6.43580x_{19} - 6.43580x_{1
x_{15}
                                                        1.76923076923
                                                                                                                                                                                                           -6.769231x_1 - 1.923077x_{17} + 0.307692x_{28} + 7.487179x_4 + 3.846154x_5 - 4.512821x_6 - 0.051282x_{19} - 6.769231x_1 - 1.923077x_{17} + 0.307692x_{28} + 7.487179x_4 + 3.846154x_5 - 4.512821x_6 - 0.051282x_{19} - 6.769231x_1 - 1.923077x_{17} + 0.307692x_{28} + 7.487179x_4 + 3.846154x_5 - 4.512821x_6 - 0.051282x_{19} - 6.769231x_1 - 1.923077x_{17} + 0.307692x_{28} + 7.487179x_4 + 3.846154x_5 - 4.512821x_6 - 0.051282x_{19} - 6.769231x_1 - 0.051282x_{19} + 0.05128x_{19} + 0.05128
                                                       34.1538461538
x_{16}
x_{22}
                                                        15.6923076923
                                                                                                                                                                                                          +3.538462x_1 + 1.846154x_{17} - 1.615385x_{28} - 12.641026x_4 - 11.692308x_5 - 3.641026x_6 - 2.564103x_{19} -
                                                                                                                                                                                                             24.3076923077
 x_{18}
                                                        5.30769230769
                                                                                                                                                                                                             x_{11}
                                                                                                                                                                                                          x_{20}
                                                       37.3846153846
                                                        24.1538461538
                                                                                                                                                                                                           x_{21}
                                                                                                                                                                                                           5.84615384615
    x_9
                                                                                                                                                                                                             -3.000000x_1 + 1.000000x_{17} - 1.000000x_{28} - 3.000000x_4 - 8.000000x_5 - 5.000000x_6 - 1.000000x_{19}
                                                                                                   15.0
 x_{23}
                                                                                                                                                                                                           -2.076923x_1 - 0.692308x_{17} + 0.230769x_{28} + 3.615385x_4 + 2.384615x_5 - 0.384615x_6 + 0.461538x_{19}
                                                     5.61538461538
    x_8
                                                       40.2307692308
                                                                                                                                                                                                             -4.153846x_1 - 1.384615x_{17} - 0.538462x_{28} + 6.230769x_4 + 2.769231x_5 - 4.769231x_6 - 0.076923x_{19} + 2.769231x_6 - 0.076923x_{19} + 2.76923x_{19} + 2.7662x_{19} + 2
  x_{25}
                                                                                                                                                                                                             x_{26}
                                                     31.4615384615
                                                       24.6923076923
                                                                                                                                                                                                             -3.461538x_1 - 0.153846x_{17} - 0.615385x_{28} - 3.641026x_4 - 2.692308x_5 - 5.641026x_6 - 1.564103x_{19} - 6.64103x_{19} - 6.64100x_{19} - 
 x_{27}
                                                                                                                                                                                                          +0.692308x_1+0.230769x_{17}-0.076923x_{28}-1.871795x_4-1.461538x_5-0.871795x_6-0.487179x_{19}-1.461538x_{19}-0.871795x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.076923x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07692x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602x_{10}-0.07602
                                                  0.461538461538
  x_3
                                                     32.3076923077
                                                                                                                                                                                                           +3.461538x_1 + 2.153846x_{17} - 2.384615x_{28} - 16.025641x_4 - 15.307692x_5 - 12.025641x_6 - 4.102564x_{19} - 12.025641x_6 - 12.025641x_6 - 12.02564x_{19} -
 x_{29}
                                                                                                                                                                                                           -8.384615x_1 - 2.461538x_{17} - 0.846154x_{28} + 16.410256x_4 + 4.923077x_5 - 10.589744x_6 + 0.641026x_{19} - 0.580744x_6 + 0.641026x_6 + 0.641026x_6 + 0.580744x_6 + 0.641026x_6 + 0.580744x_6 + 0.641026x_6 + 0.58074x_6 + 0.58074x_6 + 0.641026x_6 + 0.58074x_6 + 0.641026x_6 + 0.58074x_6 + 0.641026x_6 + 0.58074x_6 + 0.641026x_6 + 0.641026
x_{30}
                                                       58.0769230769
                                                       24.3846153846
                                                                                                                                                                                                           x_{31}
                                                                                                                                                                                                           +0.076923x_1 - 1.307692x_{17} + 0.769231x_{28} + 6.051282x_4 + 5.615385x_5 + 2.051282x_6 + 1.205128x_{19} - 6.05128x_{19} + 
x_{32}
                                                     4.38461538462
                                                       7.23076923077
                                                                                                                                                                                                             -0.153846x_1 - 1.384615x_{17} + 1.461538x_{28} + 5.897436x_4 + 9.769231x_5 + 5.897436x_6 + 1.589744x_{19} - 6.897436x_6 + 1.589744x_{19} - 6.89744x_{19} - 6.89744x_{19} - 6.89744x_{19} - 6.89744x_{19} - 6.89744x_{19} - 6.8974x_{19} - 6.897
 x_{33}
                                                       10.9230769231
                                                                                                                                                                                                             -4.615385x_1 - 0.538462x_{17} - 0.153846x_{28} + 1.256410x_4 + 0.076923x_5 - 4.743590x_6 + 0.025641x_{19} - 0.025641x_{19} + 0.025641x_{19} - 0.025641x_{19} + 0.02564x_{19} + 0.025
          z
```

 x_4 enters and x_3 leaves

```
9.2602739726
                                                                                                                                                                  x_{14}
                                           3.35616438356
                                                                                                                                                                -1.465753x_1 - 0.821918x_{17} + 1.273973x_{28} - 3.438356x_3 + 7.205479x_5 + 4.438356x_6 + 0.068493x_{19} + 0.06849x_{19} + 0.06840x_{19} + 0.0
 x_{15}
                                                                                                                                                                  x_{16}
                                                                              36.0
                                                                                                                                                                12.5753424658
 x_{22}
                                            28.4109589041
                                                                                                                                                                 -2.383562x_{1} - 0.794521x_{17} - 0.068493x_{28} - 8.890411x_{3} - 2.301370x_{5} - 11.109589x_{6} - 1.767123x_{19} - 0.068493x_{19} - 0.06849x_{19} - 0.06840x_{19} - 0
x_{18}
                                                                                                                                                                 5.21917808219
 x_{11}
                                            39.8630136986
                                                                                                                                                                  -0.205479x_1 - 0.068493x_{17} - 0.643836x_{28} - 5.369863x_3 - 9.232877x_5 - 6.630137x_6 - 2.410959x_{19} - 0.0643836x_{28} - 0.064386x_{28} - 0.06446x_{28} - 0.06446x_{28} - 0.06446x_{28} - 0.06446x_{28} - 0.0646x_{28} - 0.0646x
 x_{20}
                                                                                                                                                                  x_{21}
                                            25.9178082192
                                                                                                                                                                  -0.164384x_1 - 0.054795x_{17} - 0.315068x_{28} - 0.095890x_3 - 0.986301x_5 - 1.904110x_6 - 0.328767x_{19} + 0.0047676x_{19} + 0.00476x_{19} + 0.0047676x_{19} + 0.0047676x_{19} + 0.0047676x_{19} + 0.00476x_{19} + 0.
                                             5.8904109589
  x_9
                                            14.2602739726
                                                                                                                                                                x_{23}
                                           6.50684931507
                                                                                                                                                                 x_8
                                                                                                                                                                 x_{25}
                                            41.7671232877
                                                                                                                                                                 -1.794521x_1 + 0.068493x_{17} - 1.356164x_{28} - 3.630137x_3 - 3.767123x_5 - 6.369863x_6 - 1.589041x_{19} + 0.068493x_{17} - 0.068493x_{17} - 0.068493x_{17} - 0.068493x_{18} - 0.068476x_{18} 
                                           33.1369863014
 x_{26}
                                                                                                                                                                  23.7945205479
 x_{27}
                                      0.246575342466
                                                                                                                                                                x_4
                                                                                                                                                                  -2.465753x_1 + 0.178082x_{17} - 1.726027x_{28} + 8.561644x_3 - 2.794521x_5 - 4.561644x_6 + 0.068493x_{19} + 0.06849x_{19} + 0.06846x_{19} + 0.
                                           28.3561643836
 x_{29}
                                                                                                                                                                62.1232876712
  x_{30}
                                            26.3698630137
                                                                                                                                                                  x_{31}
                                           5.87671232877
                                                                                                                                                                 x_{32}
                                           8.68493150685
                                                                                                                                                                 +2.027397x_{1} -0.657534x_{17} +1.219178x_{28} -3.150685x_{3} +5.164384x_{5} +3.150685x_{6} +0.054795x_{19} -0.054795x_{19} +0.054795x_{19} +0.054775x_{19} 
x_{33}
                                                                                                                                                                  -4.150685x_1 - 0.383562x_{17} - 0.205479x_{28} - 0.671233x_3 - 0.904110x_5 - 5.328767x_6 - 0.301370x_{19} - 0.001370x_{19} - 0.00170x_{19} - 0.0
                                          11.2328767123
```

 x_7 enters and x_4 leaves

```
10.0
                                                              -3.000000x_1
                                                                                                                                                                                                           -0.000000x_{28} - 1.000000x_3 - 2.000000x_5 + 1.000000x_6 - 0.000000x_{19} + 0.000000x_{24}
x_{14}
                                2.2
                                                               -3.200000x_1 - 1.400000x_{17} + 1.466667x_{28} - 0.933333x_3 + 10.866667x_5 + 6.622222x_6 + 1.288889x_{19} - 0.422222x_{24} + 0.42222x_{24} + 0.4222x_{24} + 0.4222x_{24} + 0.422x_{24} + 0.42x_{24} + 0.42x_{24}
x_{15}
                              35.6
                                                              x_{16}
                              15.6
                                                              +3.400000x_1 + 1.800000x_{17} - 1.600000x_{28} + 0.200000x_3 - 11.400000x_5 - 3.466667x_6 - 2.466667x_{19} + 1.066667x_{24} + 1.066667x_{19} + 1.06667x_{19} + 1.066667x_{19} + 1.06667x_{19} + 1.066667x_{19} + 1.06667x_{19} + 1
 x_{22}
                             28.0
                                                              x_{18}
                                5.4
                                                               x_{11}
                              38.0
                                                              x_{20}
                              25.6
                                                              -2.600000x_{17} - 0.200000x_{17} - 0.933333x_{28} - 3.133333x_{3} - 4.733333x_{5} - 8.577778x_{6} - 0.911111x_{19} - 0.822222x_{24} - 0.911111x_{19} - 0.822222x_{24} - 0.911111x_{19} - 0.822222x_{24} - 0.91111x_{19} - 0.822222x_{24} - 0.9111x_{19} - 0.822222x_{24} - 0.911x_{19} - 0.822222x_{24} - 0.911x_{19} - 0.822222x_{24} - 0.911x_{19} - 0.822222x_{24} - 0.911x_{19} - 0.82222x_{24} - 0.911x_{19} - 0.82222x_{24} - 0.911x_{19} - 0.82222x_{24} - 0.911x_{19} - 0.82222x_{24} - 0.911x_{19} - 0.8222x_{24} - 0.91x_{19} - 0.822x_{24} - 0.91x_{19} - 0.822x_{24} - 0.91x_{19} - 0.82x_{24} - 0.91x_{24} -
x_{21}
                                                              x_9
                               6.0
 x_{23}
                               16.2
                                                               6.2
                                                              x_8
                                                              40.6
 x_{25}
                                                               -2.000000x_{1} - 0.000000x_{17} - 1.3333333x_{28} - 3.333333x_{3} - 3.333333x_{5} - 6.111111x_{6} - 1.444444x_{19} + 0.111111x_{24} - 1.44444x_{19} - 1.11111x_{24} - 1.4444x_{19} - 1.11111x_{24} - 1.444x_{19} - 1.11111x_{24} - 1.444x_{19} - 1.11111x_{24} - 1.444x_{19} - 1.11111x_{24} - 1.444x_{19} - 1.11111x_{24} - 1.1111x_{24} - 1.111x_{24} - 1.111x_{24} - 1.111x_{24} - 1.111x_{24} - 1.11x_{24} - 1.1
                             33.0
  x_{26}
                             23.0
                                                              x_{27}
                                                              +0.600000x_1 + 0.200000x_{17} - 0.066667x_{28} - 0.866667x_3 - 1.266667x_5 - 0.755556x_6 - 0.422222x_{19} + 0.155556x_{24}
                               0.4
  x_7
                              30.8
                                                              +1.200000x_1 + 1.400000x_{17} - 2.133333x_{28} + 3.266667x_3 - 10.533333x_5 - 9.177778x_6 - 2.511111x_{19} + 0.977778x_{24} + 0.977778x_{19} + 0.9777778x_{19} + 0.977778x_{19} + 0.9777778x_{19} + 0.977778x_{19} + 0.977778x_{1
 x_{29}
                                                              61.4
 x_{30}
                              25.0
                                                              x_{31}
                                                              +0.400000x_1 - 1.200000x_{17} + 0.733333x_{28} - 0.466667x_3 + 4.933333x_5 + 1.644444x_6 + 0.977778x_{19} - 0.044444x_{24} + 0.977778x_{21} + 0.04444x_{24} + 0.977778x_{21} + 0.04444x_{24} + 0.977778x_{21} + 0.04444x_{24} + 0.977778x_{21} + 0.04444x_{24} + 0.977778x_{24} + 0.04444x_{24} + 0.0444x_{24} 
 x_{32}
                                4.6
                                7.6
                                                              x_{33}
                                                              11.6
       z
```

 x_{-1} enters and Final Dictionary Solution: 11.6 Num Pivots: 9