```
x_9
      5.0
           +1.000000x_1 +2.000000x_2 -3.000000x_3
                                                                -1.000000x_5 + 2.000000x_6 - 3.000000x_7 + 1.000000x_8
           4.0
x_{10}
      1.0
                                                   +2.000000x_4 - 1.000000x_5 + 3.000000x_6 - 3.000000x_7 - 3.000000x_8
           +2.000000x_1 +2.000000x_2
x_{11}
x_{12}
      4.0
            -1.000000x_1 + 3.000000x_2 + 1.000000x_3 - 2.000000x_4 + 3.000000x_5 + 1.000000x_6 - 3.000000x_7 + 3.000000x_8
           +3.000000x_1 -2.000000x_2 -2.000000x_3
                                                                -2.000000x_5 + 3.000000x_6 + 3.000000x_7 - 2.000000x_8
     10.0
x_{13}
     15.0
            -3.000000x_1 + 3.000000x_2
                                                   +1.000000x_4
                                                                             -1.000000x_6 + 2.000000x_7 - 2.000000x_8
x_{14}
                                                                +3.000000x_5 -1.000000x_6 +3.000000x_7 +3.000000x_8
     4.0
           -2.000000x_1 - 1.000000x_2 - 3.000000x_3
x_{15}
x_{16}
     13.0
                         -2.0000000x_2 - 2.000000x_3 - 1.000000x_4 - 1.000000x_5 - 3.000000x_6 + 2.000000x_7 + 2.000000x_8
      3.0
                         +2.0000000x_2 - 2.000000x_3 + 1.0000000x_4 + 3.000000x_5 - 2.000000x_6 + 2.000000x_7 + 2.000000x_8
x_{17}
     15.0
                                      +2.000000x_3
                                                                -3.000000x_5 -1.000000x_6 -1.000000x_7 +2.000000x_8
           +2.0000000x_1
x_{18}
           -3.000000x_1 - 1.000000x_2 + 3.000000x_3 + 3.000000x_4 - 2.000000x_5 + 3.000000x_6
x_{19}
     10.0
                                                                                                       -1.000000x_8
     9.0
                         +2.000000x_2 +3.000000x_3 -1.000000x_4 +1.000000x_5 +2.000000x_6 +1.000000x_7 +3.000000x_8
x_{20}
            -3.000000x_1 -3.000000x_2 -1.000000x_3
                                                                +1.000000x_5
     14.0
                                                                                          +3.000000x_7 +1.000000x_8
x_{21}
                                                                             -3.000000x_6 + 1.000000x_7 - 3.000000x_8
     13.0
           -1.000000x_1 + 2.000000x_2 - 3.000000x_3 - 3.000000x_4
x_{22}
     11.0
           +3.000000x_1 - 1.000000x_2 + 2.000000x_3
                                                                +3.000000x_5 +2.000000x_6 -3.000000x_7 -2.000000x_8
x_{23}
                                                                             -1.000000x_6 -1.000000x_7
     0.0
           +1.000000x_1 +2.000000x_2 +1.000000x_3 +1.000000x_4
```

No initialization required –; Proceed to Optimize.

```
5.0
        +1.000000x_1 +2.000000x_2 -3.000000x_3
                                               -1.000000x_5 + 2.000000x_6 - 3.000000x_7 + 1.000000x_8
x_9
x_{10}
    4.0
        1.0
        +2.000000x_1 +2.000000x_2
                                     +2.000000x_4 -1.000000x_5 +3.000000x_6 -3.000000x_7 -3.000000x_8
x_{11}
x_{12}
    4.0
        -2.000000x_5 +3.000000x_6 +3.000000x_7 -2.000000x_8
    10.0
        +3.000000x_1 - 2.000000x_2 - 2.000000x_3
x_{13}
    15.0
        -3.000000x_1 + 3.000000x_2
                                     +1.000000x_4
                                                         -1.000000x_6 + 2.000000x_7 - 2.000000x_8
x_{14}
    4.0
        -2.000000x_1 - 1.000000x_2 - 3.000000x_3
                                               +3.000000x_5 -1.000000x_6 +3.000000x_7 +3.000000x_8
x_{15}
x_{16}
    13.0
                  3.0
                  x_{17}
    15.0
        +2.000000x_1
                            +2.000000x_3
                                               -3.000000x_5 -1.000000x_6 -1.000000x_7 +2.000000x_8
x_{18}
    10.0
        -3.000000x_1 - 1.000000x_2 + 3.000000x_3 + 3.000000x_4 - 2.000000x_5 + 3.000000x_6
x_{19}
    9.0
                  x_{20}
    14.0
        -3.000000x_1 - 3.000000x_2 - 1.000000x_3
                                               +1.000000x_5
                                                                  +3.000000x_7 +1.000000x_8
x_{21}
    13.0
                                                         -3.000000x_6 + 1.000000x_7 - 3.000000x_8
        -1.000000x_1 + 2.000000x_2 - 3.000000x_3 - 3.000000x_4
x_{22}
    11.0
        +3.000000x_1 -1.000000x_2 +2.000000x_3
                                               +3.000000x_5 +2.000000x_6 -3.000000x_7 -2.000000x_8
x_{23}
                                                         -1.000000x_6 -1.000000x_7
    0.0
        +1.000000x_1 +2.000000x_2 +1.000000x_3 +1.000000x_4
```

 $x_1$  enters and  $x_{15}$  leaves

```
x_9
        -0.500000x_{15} + 1.500000x_2 - 4.500000x_3
                                                +0.500000x_5 +1.500000x_6 -1.500000x_7 +2.500000x_8
    10.0
         x_{10}
    5.0
        -1.000000x_{15} + 1.000000x_2 - 3.000000x_3 + 2.000000x_4 + 2.000000x_5 + 2.000000x_6
x_{11}
x_{12}
    2.0
        +0.500000x_{15} + 3.500000x_2 + 2.500000x_3 - 2.000000x_4 + 1.500000x_5 + 1.500000x_6 - 4.500000x_7 + 1.500000x_8
    16.0
        -1.500000x_{15} -3.500000x_2 -6.500000x_3
                                                +2.500000x_5 +1.500000x_6 +7.500000x_7 +2.500000x_8
x_{13}
        x_{14}
    9.0
    2.0
         -0.500000x_{15} -0.500000x_2 -1.500000x_3
                                                +1.500000x_5 -0.500000x_6 +1.500000x_7 +1.500000x_8
x_1
x_{16}
    13.0
                   -2.0000000x_2 - 2.0000000x_3 - 1.0000000x_4 - 1.0000000x_5 - 3.0000000x_6 + 2.0000000x_7 + 2.0000000x_8
                   +2.0000000x_2 - 2.000000x_3 + 1.0000000x_4 + 3.000000x_5 - 2.000000x_6 + 2.000000x_7 + 2.0000000x_8
    3.0
x_{17}
x_{18}
    19.0
                                                          -2.000000x_6 + 2.000000x_7 + 5.000000x_8
        -1.000000x_{15} - 1.000000x_2 - 1.000000x_3
        x_{19}
    4.0
    9.0
                   +2.000000x_2 +3.000000x_3 -1.000000x_4 +1.000000x_5 +2.000000x_6 +1.000000x_7 +3.000000x_8
x_{20}
    8.0
        +1.500000x_{15} -1.500000x_2 +3.500000x_3
                                                 -3.500000x_5 + 1.500000x_6 - 1.500000x_7 - 3.500000x_8
x_{21}
    11.0
        x_{22}
        -1.500000x_{15} - 2.500000x_2 - 2.500000x_3
                                                +7.500000x_5 +0.500000x_6 +1.500000x_7 +2.500000x_8
    17.0
x_{23}
        2.0
```

 $x_2$  enters and  $x_1$  leaves

```
+3.000000x_7 +7.000000x_8
   13.0
       -2.000000x_{15} -3.000000x_1 -9.000000x_3
                                           +5.000000x_5
x_9
    0.0
        +1.000000x_{15} + 5.000000x_1 + 6.000000x_3 + 1.000000x_4 - 6.000000x_5 - 2.000000x_6 - 4.000000x_7 - 5.000000x_8
x_{10}
x_{11}
    9.0
        16.0
       x_{12}
    2.0
       +2.000000x_{15} + 7.000000x_1 + 4.000000x_3
                                           -8.000000x_5 +5.000000x_6 -3.000000x_7
                                                                       -8.000000x_8
x_{13}
   27.0
        x_{14}
       -1.000000x_{15} - 2.000000x_1 - 3.000000x_3
                                           +3.000000x_5 -1.000000x_6 +3.000000x_7 +3.000000x_8
   4.0
x_2
x_{16}
       +2.000000x_{15} + 4.000000x_1 + 4.000000x_3 - 1.000000x_4 - 7.000000x_5 - 1.000000x_6 - 4.000000x_7 - 4.000000x_8
    5.0
x_{17}
   11.0
       -2.000000x_{15} - 4.000000x_1 - 8.000000x_3 + 1.000000x_4 + 9.000000x_5 - 4.000000x_6 + 8.000000x_7 + 8.000000x_8
   15.0
                 +2.000000x_1 +2.000000x_3
                                            -3.000000x_5 -1.000000x_6 -1.000000x_7 +2.000000x_8
x_{18}
   6.0
       x_{19}
   17.0
       -2.000000x_{15} - 4.000000x_1 - 3.000000x_3 - 1.000000x_4 + 7.000000x_5
                                                              +7.000000x_7 +9.000000x_8
x_{20}
x_{21}
    2.0
       +3.000000x_{15} +3.000000x_1 +8.000000x_3
                                           -8.000000x_5 +3.000000x_6 -6.000000x_7
                                                                       -8.000000x_8
       21.0
x_{22}
                                                    +3.000000x_6 -6.000000x_7 -5.000000x_8
x_{23}
    7.0
       +1.000000x_{15} +5.000000x_1 +5.000000x_3
    8.0
```

 $x_4$  enters and  $x_{16}$  leaves

```
-2.000000x_{15} -3.000000x_1 -9.000000x_3
                                       +5.000000x_5
                                                       +3.000000x_7 +7.000000x
x_9
      5.0
x_{10}
   19.0
      x_{11}
x_{12}
   6.0
      -7.000000x_{15} - 15.000000x_1 - 16.000000x_3 + 2.000000x_{16} + 26.000000x_5
                                                      +14.000000x_7 +20.0000000
      +2.000000x_{15} +7.000000x_1 +4.000000x_3
                                       -8.000000x_5 +5.000000x_6 -3.000000x_7 -8.000000x_6
   2.0
x_{13}
   32.0
      x_{14}
      -1.000000x_{15} -2.000000x_1 -3.000000x_3
   4.0
                                       +3.000000x_5 -1.000000x_6 +3.000000x_7 +3.000000x_7
x_2
x_4
   5.0
      16.0
                       -4.000000x_3 -1.000000x_{16} +2.000000x_5 -5.000000x_6 +4.000000x_7 +4.000000x_7
x_{17}
x_{18}
   15.0
               +2.000000x_1 +2.000000x_3
                                       -3.000000x_5 -1.000000x_6 -1.000000x_7 +2.000000x_7
      x_{19}
   21.0
      12.0
x_{20}
      +3.000000x_{15} +3.000000x_1 +8.000000x_3
                                       -8.000000x_5 +3.000000x_6 -6.000000x_7 -8.000000x_6
   2.0
x_{21}
      6.0
x_{22}
   7.0
      +1.000000x_{15} +5.000000x_1 +5.000000x_3
                                               +3.000000x_6 -6.000000x_7 -5.000000x
x_{23}
   13.0
               +1.000000x_1 -1.000000x_3 -1.000000x_{16} -1.000000x_5 -4.000000x_6 +1.000000x_7 +2.000000x_7
z
```

 $x_1$  enters and  $x_{22}$  leaves

```
11.9411764706
    x_9
                                                                                                                                                                                                                                                                                                      -1.235294x_{15} - 0.529412x_{22} - 1.117647x_3 + 0.588235x_{16} + 1.294118x_5 - 4.058824x_6 + 2.058824x_7 - 1.0666x_7 + 1.06
x_{10}
                                                                            8.17647058824
                                                                                                                                                                                                                                                                                                   x_{11}
                                                                            21.1176470588
x_{12}
                                                                      0.705882352941
                                                                                                                                                                                                                                                                                                 +0.058824x_{15}+0.882353x_{22}+2.529412x_3-0.647059x_{16}+2.176471x_5+1.764706x_6-2.764706x_7+6.764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2.1764706x_8+2
                                                                                                                                                                                                                                                                                                   -1.294118x_{15} - 0.411765x_{22} - 4.647059x_3 + 1.235294x_{16} + 3.117647x_5 + 4.176471x_6 + 4.823529x_7 - 1.866x_7 + 1.066x_7 + 
                                                                            4.47058823529
  x_{13}
                                                                              30.2352941176
                                                                                                                                                                                                                                                                                                 +1.352941x_{15} + 0.294118x_{22} + 1.176471x_3 - 1.882353x_{16} - 5.941176x_5 - 4.411765x_6 + 1.411765x_7 - 1.4866x_7 - 1.48
  x_{14}
                                                                                                                                                                                                                                                                                                   x_2
                                                                            3.29411764706
                                                                            6.41176470588
                                                                                                                                                                                                                                                                                                 +0.117647x_{15} - 0.235294x_{22} - 0.941176x_3 - 0.294118x_{16} - 0.647059x_5 - 1.470588x_6 + 0.470588x_7 - 0.47058x_7 - 0.47058x_8 -
    x_4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16.0
  x_{17}
                                                                              15.7058823529
                                                                                                                                                                                                                                                                                                      -0.941176x_{15} - 0.117647x_{22} - 0.470588x_3 + 0.352941x_{16} + 0.176471x_5 - 1.235294x_6 + 1.235294x_7 + 3.76471x_5 - 1.235294x_6 + 1.235294x_7 + 3.76471x_5 - 1.235274x_7 + 3.764774x_7 
  x_{18}
                                                                                                                                                                                                                                                                                                 +1.823529x_{15} - 0.647059x_{22} + 4.411765x_3 - 1.058824x_{16} - 8.529412x_5 - 0.294118x_6 - 2.705882x_7 - 6.2060x_7 - 0.0000x_7 - 0.00
                                                                              24.8823529412
  x_{19}
                                                                            9.17647058824
                                                                                                                                                                                                                                                                                                      -0.235294x_{15} + 0.470588x_{22} + 2.882353x_3 - 0.411765x_{16} + 1.294118x_5 + 1.941176x_6 + 2.058824x_7 + 5.9666x_7 + 2.0666x_7 + 2.06
  x_{20}
                                                                                                                                                                                                                                                                                                   +1.588235x_{15} - 0.176471x_{22} + 4.294118x_3 + 0.529412x_{16} - 3.235294x_5 + 2.647059x_6 - 2.647059x_7 - 5.3666x_7 + 2.647059x_8 - 2.647050x_8 - 2.64700x_8 - 2.64
  x_{21}
                                                                            3.05882352941
                                                                      0.352941176471
                                                                                                                                                                                                                                                                                                   x_1
                                                                            8.76470588235
                                                                                                                                                                                                                                                                                                   -1.352941x_{15} - 0.294118x_{22} - 1.176471x_3 + 0.882353x_{16} + 7.941176x_5 + 2.411765x_6 - 0.411765x_7 - 0.56x_7 - 0.56x_
    x_{23}
                                                                            13.3529411765
                                                                                                                                                                                                                                                                                                 -0.470588x_{15} - 0.058824x_{22} - 2.235294x_3 - 0.823529x_{16} + 0.588235x_5 - 4.117647x_6 + 2.117647x_7 + 2.866x_5 + 2.117647x_7 + 
                 z
```

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

```
12.1636363636
                                                       x_9
x_{10}
                            9.4
                                                        21.6181818182
                                                       x_{11}
              2.76363636364
                                                       +1.127273x_{15} + 0.763636x_{22} + 5.418182x_3 - 0.290909x_{16} - 0.672727x_{21} + 3.545455x_6 - 4.545455x_7 + 3.545455x_6 + 4.545455x_7 + 3.545455x_6 + 4.545455x_7 + 3.545455x_7 + 3.545455x_6 + 4.545455x_7 + 3.545455x_7 + 3.54545x_7 + 3.54545x_7 + 3.54545x_7 + 3.54545x_7 + 3.54545x_7 + 3.54545x_7 + 3.54545
x_{12}
                                                       7.41818181818
x_{13}
               24.6181818182
                                                        x_{14}
                                                       3.12727272727
x_2
x_4
                                                        5.8
               17.8909090909
                                                       x_{17}
                                                        15.8727272727
x_{18}
               16.8181818182
                                                       -2.363636x_{15} - 0.181818x_{22} - 6.909091x_3 - 2.454545x_{16} + 2.636364x_{21} - 7.272727x_6 + 4.272727x_7 + 7.272727x_7 + 7.27277x_7 + 7.272727x_7 + 7.27277x_7 + 7.272727x_7 + 7.27277x_7 + 7.2727x_7 + 7.2727x_7 + 7.2727x_7 + 7.2727x_7 + 7.2727x_
x_{19}
                           10.4
                                                        x_{20}
             0.945454545455
                                                       x_5
              1.85454545455
                                                       x_1
                                                       16.2727272727
x_{23}
               13.9090909091
                                                       z
```

 $x_7$  enters and  $x_{12}$  leaves

```
11.832
 x_9
x_{10}
                         10.008
                                                                x_{11}
                         22.392
                                                                x_7
                          0.608
                                                                8.8
x_{13}
                         28.432
                                                                x_{14}
                                                                3.68
 x_2
 x_4
                           6.408
                                                                19.328
 x_{17}
                         16.536
                                                                -0.584000x_{15} + 0.056000x_{22} + 1.064000x_3 + 0.312000x_{16} - 0.216000x_{21} - 0.240000x_6 - 0.240000x_{12} + 4.232000x_{10} + 0.00000x_{10} + 0.00000x_
x_{18}
                                                                19.416
x_{19}
                         11.008
                                                                +0.648000x_{15} + 0.568000x_{22} + 5.792000x_3 - 0.264000x_{16} - 0.548000x_{21} + 3.780000x_6 - 0.220000x_{12} + 4.496000x_{13} + 4.496000x_{14} + 4.496000x_{15} + 0.548000x_{15} + 0.54800x_{15} + 0.548000x_{15} + 0.548000x_
x_{20}
                           0.448
                                                                x_5
 x_1
                           1.744
                                                                +0.264000x_{15} - 0.176000x_{22} + 0.656000x_3 + 0.448000x_{16} - 0.464000x_{21} + 1.040000x_6 + 0.040000x_{12} - 1.872000x_{12} + 0.040000x_{13} + 0.040000x_{14} + 0.040000x_{15} + 0.040000x
                         12.072
                                                                +0.832000x_{15} - 1.888000x_{22} + 1.128000x_3 + 2.624000x_{16} - 1.432000x_{21} + 3.520000x_6 + 1.520000x_{12} - 18.536000x_{12} + 1.520000x_{13} + 1.520000x_{14} + 1.520000x_{15} + 1.520000
 x_{23}
                         14.904
                                                                z
```

 $x_3$  enters and  $x_9$  leaves

```
-0.107955x_{15} + 0.012784x_{22} - 0.177557x_9 - 0.080966x_{16} + 0.001420x_{21} + 0.021307x_6 + 0.021307x_{12} + 0.021307x_{13} + 0.001420x_{21} + 0.001420x_{22} + 0.001420x_{23} + 0.001420x_{24} + 0.00140x_{24} + 0.001
                                                 2.10085227273
   x_3
                                                                                                                                                                                                          13.7727272727
x_{10}
                                                                                                                                                                                                        15.6860795455
x_{11}
                                                 3.11221590909
                                                                                                                                                                                                        +0.119318x_{15}+0.183239x_{22}-0.211648x_{9}-0.160511x_{16}-0.146307x_{21}+0.805398x_{6}-0.194602x_{12}+1
   x_7
                                                                                                                                                                                                        +0.562500x_{15} - 0.171875x_{22} - 0.390625x_9 + 1.421875x_{16} - 1.296875x_{21} + 8.546875x_6 - 0.453125x_{12} - 4.566875x_{10} + 1.066875x_{10} + 1.06675x_{10} + 1.06675x_{10} + 1.06675x_{1
                                                                       13.421875
 x_{13}
                                                 30.0454545455
                                                                                                                                                                                                          -0.090909x_{15} + 1.681818x_{22} - 0.136364x_9 - 3.318182x_{16} + 0.909091x_{21} - 4.363636x_6 - 1.363636x_{12} + 1.566666x_{12} + 1.566666x_{13} + 1.566666x_{12} + 1.566666x_{13} + 1.566666x_{13} + 1.566666x_{14} + 1.566666x_{14} + 1.566666x_{14} + 1.56666x_{15} + 1.566666x_{15} + 1.56666x_{15} + 1
x_{14}
                                                                                                                                                                                                        4.35227272727
   x_2
   x_4
                                                 5.13068181818
                                                                                                                                                                                                        +0.113636x_{15} - 0.039773x_{22} + 0.107955x_9 - 0.414773x_{16} + 0.051136x_{21} - 1.232955x_6 - 0.232955x_{12} + 0.051136x_{21} - 0.039773x_{22} + 0.00765x_{12} + 0.0076x_{13} + 0.007
                                                                                                                                                                                                        +1.409091x_{15} + 0.306818x_{22} - 0.261364x_9 - 0.943182x_{16} - 0.965909x_{21} - 1.488636x_6 - 0.488636x_{12} + 3.006666x_{12} + 3.006666x_{13} + 3.006666x_{14} + 3.006666x_{14} + 3.006666x_{14} + 3.006666x_{14} + 3.006666x_{14} + 3.006666x_{14} + 3.00666x_{14} + 3.0066x_{14} + 3.00666x_{14} + 3.00666x_{14} + 3.00666x_{14} + 3.0066x_{14} + 3.006x_{14} + 3.006x_{14} + 3.006x_{14} + 3.006x_{14} + 3.006x_{1
 x_{17}
                                                 22.4204545455
                                                                                                                                                                                                          -0.698864x_{15} + 0.069602x_{22} - 0.188920x_9 + 0.225852x_{16} - 0.214489x_{21} - 0.217330x_6 - 0.217330x_{12} + 4
x_{18}
                                                  18.7713068182
                                                                                                                                                                                                        15.6008522727
 x_{19}
                                                  23.1761363636
                                                                                                                                                                                                        x_{20}
                                                                                                                                                                                                          x_5
                                                                                        1.1875
                                                 3.12215909091
                                                                                                                                                                                                        +0.193182x_{15} - 0.167614x_{22} - 0.116477x_9 + 0.394886x_{16} - 0.463068x_{21} + 1.053977x_6 + 0.053977x_{12} - 1.06677x_{10} + 0.067677x_{10} + 0.06777x_{10} + 0.067
    x_1
                                                                                                                                                                                                        +0.710227x_{15} - 1.873580x_{22} - 0.200284x_9 + 2.532670x_{16} - 1.430398x_{21} + 3.544034x_6 + 1.544034x_{12} - 1.544034x_{13} + 1.544034x_{14} + 1.544034x_{15} + 1.54404x_{15} + 1.54404x_{15} + 1.54404x_{15} + 1.54404x_{15
                                                  14.4417613636
   x_{23}
                                                 15.9460227273
                                                                                                                                                                                                        +0.170455x_{15} + 0.190341x_{22} - 0.088068x_9 - 0.872159x_{16} - 0.423295x_{21} - 2.349432x_6 - 0.349432x_{12} + 3.0666x_9 - 0.088068x_9 - 0.872159x_{16} - 0.423295x_{21} - 2.349432x_6 - 0.349432x_{12} + 3.0666x_9 - 0.088068x_9 - 0.872159x_{16} - 0.423295x_{21} - 2.349432x_6 - 0.349432x_{12} + 3.0666x_9 - 0.088068x_9 - 0.872159x_{16} - 0.423295x_{21} - 0.088068x_9 - 0.088068
```

 $x_8$  enters and  $x_5$  leaves

```
-0.028409x_{15} - 0.046875x_{22} - 0.197443x_9 - 0.021307x_{16} - 0.058239x_{21} + 0.080966x_6 + 0.080966x_{12} - 0.080966x_{12} - 0.080966x_{13} - 0.080966x_{14} - 0.080966x_{15} - 0.08096x_{15} - 0.0
                                  2.47869318182
  x_3
x_{10}
                                  12.9630681818
                                                                                                                                      -0.119318x_{15} - 0.046875x_{22} + 0.620739x_9 - 0.839489x_{16} - 0.194602x_{21} - 0.509943x_6 - 0.509943x_{12} + 0.620739x_{12} + 0.620739x_{13} + 0.620739x_{14} + 0.620739x_{15} + 0.620737x_{15} + 0.620737x_{15} + 0.620737x_{15} + 0.620737x_{15} + 0.620737x_{15} + 0.620737x_{15} + 0.62073x_{15} + 0.62077x_{15} + 0.62077x_{15
 x_{11}
                                  14.6605113636
                                 3.97585227273
                                                                                                                                      +0.301136x_{15} +0.046875x_{22} -0.257102x_9 -0.024148x_{16} -0.282670x_{21} +0.941761x_6 -0.058239x_{12} -0.
  x_7
                                               11.046875
                                                                                                                                       +0.062500x_{15} + 0.203125x_{22} - 0.265625x_9 + 1.046875x_{16} - 0.921875x_{21} + 8.171875x_6 - 0.828125x_{12} + 2.
 x_{13}
                                 37.9261363636
                                                                                                                                      x_{14}
                                                                                                                                      +0.340909x_{15} + 0.062500x_{22} - 0.130682x_9 - 0.244318x_{16} - 0.301136x_{21} + 0.028409x_6 + 0.028409x_{12} - 1.
                                 5.75568181818
  x_2
                                                                                                                                      +0.227273x_{15} - 0.125000x_{22} + 0.079545x_9 - 0.329545x_{16} - 0.034091x_{21} - 1.147727x_6 - 0.147727x_{12} - 0.
  x_4
                                 5.67045454545
                                                                                                                                      +1.818182x_{15} + 0.000000x_{22} - 0.363636x_9 - 0.636364x_{16} - 1.272727x_{21} - 1.181818x_6 - 0.181818x_{12} - 1.
                                 24.3636363636
 x_{17}
                                 21.6860795455
                                                                                                                                       -0.085227x_{15} - 0.390625x_{22} - 0.342330x_9 + 0.686080x_{16} - 0.674716x_{21} + 0.242898x_6 + 0.242898x_{12} - 2.
x_{18}
                                                                                                                                      21.3224431818
 x_{19}
                                 28.0340909091
                                                                                                                                      +1.045455x_{15} - 0.125000x_{22} - 1.284091x_9 + 0.034091x_{16} - 1.306818x_{21} + 4.670455x_6 + 0.670455x_{12} - 4.670455x_{13} - 4.670455x_{14} - 4.670455x_{15} - 4.67045x_{15} - 4.6704x_{15} - 
  x_{20}
                                                                                                                                       +0.125000x_{15} - 0.093750x_{22} - 0.031250x_9 + 0.093750x_{16} - 0.093750x_{21} + 0.093750x_6 + 0.093750x_{12} - 0.
   x_8
                                                      0.59375
                                 2.25852272727
                                                                                                                                      +0.011364x_{15} - 0.031250x_{22} - 0.071023x_9 + 0.258523x_{16} - 0.326705x_{21} + 0.917614x_6 - 0.082386x_{12} + 0.082386x_{12} + 0.082386x_{13} + 0.082386x_{14} + 0.082386x_{15} + 0.08286x_{15} + 0.
   x_1
 x_{23}
                                 3.86221590909
                                                                                                                                      -1.517045x_{15} - 0.203125x_{22} + 0.356534x_9 + 0.862216x_{16} + 0.240057x_{21} + 1.873580x_6 - 0.126420x_{12} + 8.862216x_{16} + 0.240057x_{21} + 0.862216x_{21} + 0.862
                                  17.9431818182
                                                                                                                                      z
```

 $x_{15}$  enters and  $x_{23}$  leaves

```
2.4063670412
                                                                                                                                                                                                                                                                     +0.018727x_{23} - 0.043071x_{22} - 0.204120x_9 - 0.037453x_{16} - 0.062734x_{21} + 0.045880x_6 + 0.083333x_{12} - 0.062734x_{21} + 0.062734x_{22} + 0.062734x_{22} + 0.062734x_{21} + 0.062734x_{22} + 0.06274x_{22} + 0.06274x_
   x_3
x_{10}
                                                                        11.1404494382
                                                                                                                                                                                                                                                                     14.356741573
x_{11}
                                                                            4.7425093633
                                                                                                                                                                                                                                                                     -0.198502x_{23} + 0.006554x_{22} - 0.186330x_9 + 0.147004x_{16} - 0.235019x_{21} + 1.313670x_6 - 0.083333x_{12} + 1.006554x_{23} + 0.006554x_{24} - 0.006554x_{25} - 0.006564x_{25} - 0.006564x_{25} - 0.006654x_{25} - 0.00664x_{25} - 0.00664x_{25
   x_7
                                                                                                                                                                                                                                                                   -0.041199x_{23} + 0.194757x_{22} - 0.250936x_9 + 1.082397x_{16} - 0.911985x_{21} + 8.249064x_6 - 0.833333x_{12} + 2.00066x_{10} + 0.00066x_{10} + 0.00066x_{
                                                                        11.2059925094
 x_{13}
                                                                        41.9185393258
                                                                                                                                                                                                                                                                       x_{14}
                                                                                                                                                                                                                                                                   6.62359550562
     x_2
   x_4
                                                                      6.24906367041
                                                                                                                                                                                                                                                                     -0.149813x_{23} - 0.155431x_{22} + 0.132959x_9 - 0.200375x_{16} + 0.001873x_{21} - 0.867041x_6 - 0.166667x_{12} + 0.001873x_{21} - 0.001873x_{22} + 0.001873x_{23} - 0.001873x_{24} + 0.001873x_{25} + 0.001874x_{25} + 0.001874x
                                                                                                                                                                                                                                                                   -1.198502x_{23} - 0.243446x_{22} + 0.063670x_9 + 0.397004x_{16} - 0.985019x_{21} + 1.063670x_6 - 0.333333x_{12} + 0.063670x_{16} + 0.063670x
                                                                      28.9925093633
 x_{17}
                                                                                                                                                                                                                                                                   21.4691011236
 x_{18}
                                                                                                                                                                                                                                                                     -0.063670x_{23} - 0.403558x_{22} + 0.044007x_9 - 1.622659x_{16} + 1.113296x_{21} - 2.955993x_6 - 0.083333x_{12} - 4.0063670x_{23} - 0.0063670x_{23} - 0.00670x_{23} - 0.0000x_{23} - 0.0000x_
                                                                      21.5683520599
 x_{19}
                                                                    30.6956928839
                                                                                                                                                                                                                                                                       -0.689139x_{23} - 0.264981x_{22} - 1.038390x_9 + 0.628277x_{16} - 1.141386x_{21} + 5.961610x_6 + 0.583333x_{12} + 2.06660x_{12} + 0.06660x_{13} + 0.06660x_{13} + 0.06660x_{14} + 0.06660x_{15} + 0.06660x_{
 x_{20}
                                                                                                                                                                                                                                                                       -0.082397x_{23} - 0.110487x_{22} - 0.001873x_9 + 0.164794x_{16} - 0.073970x_{21} + 0.248127x_6 + 0.083333x_{12} + 0.083333x_{12} + 0.083333x_{13} + 0.083333x_{12} + 0.083333x_{13} + 0.083333x_{13} + 0.083333x_{13} + 0.083333x_{13} + 0.083333x_{13} + 0.08333x_{13} + 0.0833x_{13} + 0.083x_{13} + 0.08x_{13} +
     x_8
                                                              0.911985018727
                                                                    2.28745318352
                                                                                                                                                                                                                                                                     -0.007491x_{23} - 0.032772x_{22} - 0.068352x_9 + 0.264981x_{16} - 0.324906x_{21} + 0.931648x_6 - 0.083333x_{12} + 0.064866x_{12} + 0.064866x_{13} + 0.064866x_{14} + 0.064866x_{15} + 0.06486x_{15} + 0.06486
     x_1
                                                                    2.54588014981
                                                                                                                                                                                                                                                                     x_{15}
                                                                      19.4475655431
                                                                                                                                                                                                                                                                     -0.389513x_{23} - 0.204120x_{22} - 0.054307x_9 - 0.220974x_{16} - 0.645131x_{21} - 1.304307x_6 - 0.083333x_{12} + 1.004307x_{12} - 0.004120x_{12} - 0.004120x
               z
```

 $x_5$  enters and  $x_{10}$  leaves

```
-0.046252x_{23} - 0.017544x_{22} - 0.143009x_9 - 0.045189x_{16} + 0.010367x_{21} + 0.485646x_6 + 0.117757x_{12} + 0.010367x_{21} + 0.010367x_{22} + 0.010367x_{23} + 0.010367x_{24} + 0.0107x_{24} + 0.0107x_{24}
                               0.872408293461
  x_3
                                  3.16267942584
                                                                                                                                    x_5
 x_{11}
                                   14.8720095694
                                                                                                                                   +0.100478x_{23} - 0.039474x_{22} + 0.572169x_9 - 0.904705x_{16} - 0.238038x_{21} - 0.805024x_6 - 0.511563x_{12} - 0.004705x_{16} - 0.004705x
                                  8.03548644338
                                                                                                                                    x_7
                                      18.692185008
                                                                                                                                    x_{13}
                                    50.0562200957
                                                                                                                                     x_{14}
                                                                                                                                   9.21770334928
  x_2
                                                                                                                                    x_4
                                     9.0326953748
                                   57.5869218501
                                                                                                                                    +0.012759x_{23} -0.719298x_{22} -1.075492x_9 +0.541201x_{16} -2.347687x_{21} -7.133971x_6 -0.975013x_{12} -2.347687x_{23} -1.012759x_{23} -1.012757x_{23} -1.01277x_{23} -1.01277x_{23} -1.01277x_{23} -1.01277x_{23} -1.01277x_{23} -1.01277x_{23} -1.01277x_{23} -1.0127x_{23} -1.0127
x_{17}
                                    12.1232057416
                                                                                                                                    x_{18}
                                                                                                                                    8.12400318979
x_{19}
                                   37.1750398724
                                                                                                                                     x_{20}
                                                                                                                                     -0.051037x_{23} - 0.122807x_{22} - 0.031366x_9 + 0.168527x_{16} - 0.109250x_{21} + 0.035885x_6 + 0.066720x_{12} - 0.066720x_{13} - 0.066720x_{14} + 0.066720x_{15} - 0.066720x
                                   1.65231259968
  x_8
                                  4.79864433812
                                                                                                                                   x_1
x_{15}
                                  21.1192185008
                                                                                                                                   +0.127592x_{23} - 0.442982x_{22} - 0.504918x_9 + 0.662015x_{16} - 0.726874x_{21} - 4.089713x_6 - 0.500133x_{12} - 1.080713x_{12} - 0.080713x_{13} - 0.080713x_{13} - 0.080713x_{14} - 0.080713x_{15} - 0.080717x_{15} - 0.080717x_{15} - 0.080717x_{15} - 0.080717x_{15} - 0.080717x_{15} - 0.080717x_{15} - 0.080717x
                                   25.1036682616
                                                                                                                                    z
```

 $x_{-1}$  enters and Final Dictionary Solution: 25.1036682616 Num Pivots: 10