

1 Dict1

$$\begin{array}{c|ccc}
 x_1 & 1 & & -1x_5 - 2x_7 \\
 x_3 & 3 & +1x_2 - 1x_4 & -1x_7 \\
 x_6 & 0 & -1x_2 & -2x_5 \\
 \hline
 z & 1 & -1x_2 + 2x_4 + 3x_5 + 1x_7 &
 \end{array}$$

x_4 enters and x_3 leaves

$$\begin{array}{c|ccc}
 x_1 & 1 & & -1x_5 - 2x_7 \\
 x_4 & 3 & +1x_2 - 1x_3 & -1x_7 \\
 x_6 & 0 & -1x_2 & -2x_5 \\
 \hline
 z & 7 & +1x_2 - 2x_3 + 3x_5 - 1x_7 &
 \end{array}$$

2 Dict2

$$\begin{array}{c|ccc}
 x_3 & 1 & & -1x_2 \\
 x_4 & 2 & -1x_1 + 2x_2 & \\
 x_5 & 1 & -2x_1 & \\
 \hline
 z & 1 & & +3x_2
 \end{array}$$

x_2 enters and x_3 leaves

$$\begin{array}{c|ccc}
 x_2 & 1 & & -1x_3 \\
 x_4 & 4 & -1x_1 - 2x_3 & \\
 x_5 & 1 & -2x_1 & \\
 \hline
 z & 4 & & -3x_3
 \end{array}$$

3 Dict3

$$\begin{array}{c|ccc}
 x_4 & 1 & +1x_1 - 1x_2 & \\
 x_5 & 2 & -1x_1 & -1x_3 \\
 x_6 & 1 & -1x_1 - 1x_2 - 1x_3 & \\
 \hline
 z & 1 & +1x_1 + 1x_2 + 2x_3 &
 \end{array}$$

x_1 enters and x_6 leaves

$$\begin{array}{c|ccc}
 x_4 & 2 & -1x_6 - 2x_2 - 1x_3 & \\
 x_5 & 1 & +1x_6 + 1x_2 & \\
 x_1 & 1 & -1x_6 - 1x_2 - 1x_3 & \\
 \hline
 z & 2 & -1x_6 & +1x_3
 \end{array}$$

4 Dict4

$$\begin{array}{c|cc}
 x_3 & 2 & +3x_1 - 1x_2 \\
 x_4 & 11 & -1x_2 \\
 x_5 & 3 & -1x_1 + 1x_2 \\
 x_6 & 6 & -1x_1 \\
 \hline
 z & 0 & +1x_1 + 2x_2
 \end{array}$$

x_1 enters and x_5 leaves

$$\begin{array}{c|cc}
 x_3 & 11 & -3x_5 + 2x_2 \\
 x_4 & 11 & -1x_2 \\
 x_1 & 3 & -1x_5 + 1x_2 \\
 x_6 & 3 & +1x_5 - 1x_2 \\
 \hline
 z & 3 & -1x_5 + 3x_2
 \end{array}$$

5 Dict5

$$\begin{array}{c|cc}
 x_6 & 6 & -1x_4 - 3x_3 + 2x_1 \\
 x_2 & 12 & -6x_3 - 1x_1 - 1x_5 \\
 \hline
 z & 0 & +2x_4 + 1x_3 - 3x_1 + 4x_5
 \end{array}$$

x_3 enters and x_2 leaves

$$\begin{array}{c|ccccc}
 x_6 & 0 & -1x_4 & +0.50x_2 & +2.50x_1 & +0.50x_5 \\
 x_3 & 2 & & -0.166667x_2 & -0.166667x_1 & -0.166667x_5 \\
 \hline
 z & 2 & +2x_4 & -0.166667x_2 & -3.166667x_1 & +3.833333x_5
 \end{array}$$

6 Dict6

$$\begin{array}{c|cc}
 x_4 & 1 & +1x_1 - 1x_2 \\
 x_5 & 2 & -1x_3 \\
 x_6 & 1 & -1x_2 - 1x_3 \\
 \hline
 z & 1 & +1x_1 + 1x_2 + 2x_3
 \end{array}$$

x_1 enters and Unbounded Dictionary!

7 Dict7

x_4	2	$-1x_5$
x_6	2	$-1x_3$
x_2	2	$-2x_5 - 2x_3$
x_1	4	$+1x_5 + 1x_3$
z	0	$+6x_5 - 5x_3$

x_5 enters and x_2 leaves

x_4	1	$+0.50x_2 + 1x_3$
x_6	2	$-1x_3$
x_5	1	$-0.50x_2 - 1x_3$
x_1	5	$-0.50x_2$
z	6	$-3x_2 - 11x_3$

8 Dict8

x_5	8.4	$+0.70x_1 - 1.40x_2 - 5.90x_3 - 5.40x_4$
x_6	4.4	$-7.10x_1 - 3.20x_2 + 7.50x_3 + 2.80x_4$
x_7	4.1	$+7.40x_1 + 1.20x_2 + 6.30x_3 + 3.30x_4$
x_8	2.4	$-0.30x_1 - 7.80x_2 - 0.90x_3 - 1.10x_4$
x_9	9.7	$-5.60x_1 - 3.20x_2 - 3.20x_3 + 3.90x_4$
z	0	$-0.90x_1 + 4.90x_2 - 3.60x_3 + 4.10x_4$

x_2 enters and x_8 leaves

x_5	7.96923076923	$+0.753846x_1 + 0.179487x_8 - 5.738462x_3 - 5.202564x_4$
x_6	3.41538461538	$-6.976923x_1 + 0.410256x_8 + 7.869231x_3 + 3.251282x_4$
x_7	4.46923076923	$+7.353846x_1 - 0.153846x_8 + 6.161538x_3 + 3.130769x_4$
x_2	0.307692307692	$-0.038462x_1 - 0.128205x_8 - 0.115385x_3 - 0.141026x_4$
x_9	8.71538461538	$-5.476923x_1 + 0.410256x_8 - 2.830769x_3 + 4.351282x_4$
z	1.50769230769	$-1.088462x_1 - 0.628205x_8 - 4.165385x_3 + 3.408974x_4$

9 Dict9

x_5	3.3	$+3.40x_1 - 5.60x_2 - 5.30x_3 - 7.60x_4$
x_6	9.8	$+6.80x_1 + 0.60x_2 - 3.40x_3 + 2.90x_4$
x_7	4.5	$+8x_1 + 1.50x_2 - 3.90x_3 + 4.30x_4$
x_8	8.8	$+7.60x_1 + 3.30x_2 - 2.50x_3 - 7.50x_4$
x_9	0.2	$-3.90x_1 - 3.30x_2 - 4.40x_3 - 4.20x_4$
z	0	$+2.80x_1 + 4.50x_2 + 3.10x_3 + 2.60x_4$

x_1 enters and x_9 leaves

x_5	3.47435897436	-0.871795 x_9	-8.476923 x_2	-9.135897 x_3	-11.261538 x_4
x_6	10.1487179487	-1.743590 x_9	-5.153846 x_2	-11.071795 x_3	-4.423077 x_4
x_7	4.91025641026	-2.051282 x_9	-5.269231 x_2	-12.925641 x_3	-4.315385 x_4
x_8	9.18974358974	-1.948718 x_9	-3.130769 x_2	-11.074359 x_3	-15.684615 x_4
x_1	0.0512820512821	-0.256410 x_9	-0.846154 x_2	-1.128205 x_3	-1.076923 x_4
z	0.14358974359	-0.717949 x_9	+2.130769 x_2	-0.058974 x_3	-0.415385 x_4

10 Dict10

x_{13}	0.2	+0.30 x_1	-7 x_2	+7.60 x_3	+4.10 x_4	-0.50 x_5	+3.40 x_6	+1.30 x_7	+5.20 x_8	+1.50 x_9	-7.90 x_{10}	-2.70 x_{11}	+2.40 x_{12}
x_{14}	0.7	-4.90 x_1	-5.50 x_2	+0.60 x_3	+1.80 x_4	-8 x_5	+2.90 x_6	-5.80 x_7	-2.30 x_8	+1.20 x_9	+0.60 x_{10}	-7.80 x_{11}	+6.80 x_{12}
x_{15}	6.3	-2.30 x_1	+6.80 x_2	+7.60 x_3	-6.10 x_4	-3.10 x_5	-1.20 x_6	-1.70 x_7	-6.90 x_8	+1.50 x_9	-6.70 x_{10}	+7.20 x_{11}	-0.90 x_{12}
x_{16}	8.3	-7.10 x_1	+1 x_2	-3.60 x_3	+0.70 x_4	+3.70 x_5	+2.90 x_6	-6.50 x_7	+6.60 x_8	-2.90 x_9	+4.70 x_{10}	-2 x_{11}	-2.30 x_{12}
x_{17}	5.6	+5.70 x_1	+6.90 x_2	-2.80 x_3	+5.10 x_4	+4.20 x_5	+4.30 x_6	-7.40 x_7	-2.10 x_8	+7 x_9	+6.90 x_{10}	+5.40 x_{11}	-5 x_{12}
x_{18}	7.9	+0.50 x_1	-7.50 x_2	+5.30 x_3	+4.40 x_4	-0.90 x_5	-1 x_6	+0.70 x_7	+3.10 x_8	+4.60 x_9	+2.80 x_{10}	+6 x_{11}	+3 x_{12}
x_{19}	6.1	+4.40 x_1	+2.10 x_2	-4.60 x_3	+7.70 x_4	-5 x_5	+2.70 x_6	+1.90 x_7	-4.10 x_8	-0.60 x_9	-1.80 x_{10}	-3.60 x_{11}	-3.70 x_{12}
x_{20}	1.3	-5.90 x_1	-4.70 x_2	+0.90 x_3	-3.10 x_4	+1.30 x_5	-5.60 x_6	-3.60 x_7	-5.40 x_8	-6.90 x_9	+4.80 x_{10}	-3.80 x_{11}	+5.60 x_{12}
x_{21}	3.9	-4.40 x_1	+4.30 x_2	+1.10 x_3	+3.60 x_4	-4 x_5	-5 x_6	+1.20 x_7	+7 x_8	+2.40 x_9	-7.60 x_{10}	-1.10 x_{11}	-4.30 x_{12}
x_{22}	2.6	+7.40 x_1	-6.30 x_2	+7.80 x_3	-3.80 x_4	-6.80 x_5	+4 x_6	-7.80 x_7	-4 x_8	+4 x_9	-1.80 x_{10}	+1.80 x_{11}	+6 x_{12}
x_{23}	8.2	+7.90 x_1	+1 x_2	-1.70 x_3	+6.50 x_4	+7.60 x_5	-2.90 x_6	-6.40 x_7	+4.50 x_8	-5.60 x_9	-1 x_{10}	-1.40 x_{11}	-7.50 x_{12}
x_{24}	9	-6.90 x_1	-5.20 x_2	-7.70 x_3	+0.60 x_4	+1.60 x_5	+1 x_6	+3.10 x_7	+7.90 x_8	-0.60 x_9	+5.50 x_{10}	-4.90 x_{11}	-6.50 x_{12}
x_{25}	0.1	-5.90 x_1	+2.90 x_2	+6.60 x_3	+0.50 x_4	+2.10 x_5	-0.60 x_6	+3.30 x_7	-0.90 x_8	+6.30 x_9	-6.20 x_{10}	+0.50 x_{11}	-0.30 x_{12}
x_{26}	6.8	-3.70 x_1	+2 x_2	+6.50 x_3	-2.60 x_4	+4.90 x_5	-7.20 x_6	-5.10 x_7	-6.20 x_8	+4.20 x_9	-1.80 x_{10}	-2.60 x_{11}	-2.60 x_{12}
x_{27}	7.6	-4.20 x_1	+1.70 x_2	+4.20 x_3	+6.30 x_4	+0.90 x_5	+2.70 x_6	+0.90 x_7	+0.10 x_8	+0.30 x_9	-3 x_{10}	+0.30 x_{11}	-6.40 x_{12}
x_{28}	9.8	-0.70 x_1	-6.50 x_2	+4.70 x_3	-1.50 x_4	-0.80 x_5	+1.80 x_6	-7.70 x_7	-4.80 x_8	+2.80 x_9	-7.10 x_{10}	+1.20 x_{11}	-3.40 x_{12}
x_{29}	3	+8 x_1	-1.50 x_2	-7.60 x_3	+4.10 x_4	-5.90 x_5	+4.10 x_6	+4.70 x_7	-0.70 x_8	-7.30 x_9	+1.90 x_{10}	+4.80 x_{11}	-0.50 x_{12}
x_{30}	9.6	-0.90 x_1	-0.70 x_2	-7.30 x_3	-1.30 x_4	+7.70 x_5	-1.70 x_6	+7.20 x_7	+1.60 x_8	-7 x_9	+1.50 x_{10}	+5.60 x_{11}	+5.60 x_{12}
x_{31}	9.7	-7.30 x_1	-7.30 x_2	+4.90 x_3	+6.90 x_4	+7.70 x_5	-6.30 x_6	+6.20 x_7	-6.10 x_8	-6.90 x_9	-6.80 x_{10}	+5.20 x_{11}	+5.90 x_{12}
z	0	-2.30 x_1	+2.90 x_2	+2.30 x_3	+4.60 x_4	-2.70 x_5	-1.80 x_6	+0.90 x_7	+3.40 x_8	-1.60 x_9	-4.10 x_{10}	+2.90 x_{11}	-4.10 x_{12}

x_2 enters and x_{13} leaves

x_2	0.0285714285714	+0.042857 x_1	-0.142857 x_{13}	+1.085714 x_3	+0.585714 x_4	-0.071429 x_5	+0.485714 x_6	+0.185714 x_7	+0.742857 x_8	+0.214286 x_9	-1
x_{14}	0.542857142857	-5.135714 x_1	+0.785714 x_{13}	-5.371429 x_3	-1.421429 x_4	-7.607143 x_5	+0.228571 x_6	-6.821429 x_7	-6.385714 x_8	+0.021429 x_9	+6
x_{15}	6.49428571429	-2.8571 x_1	-0.971429 x_{13}	+14.982857 x_3	-2.117143 x_4	-3.585714 x_5	+2.102857 x_6	-0.437143 x_7	-1.848571 x_8	+2.957143 x_9	-14
x_{16}	8.32857142857	-7.057143 x_1	-0.142857 x_{13}	-2.514286 x_3	+1.285714 x_4	+3.628571 x_5	+3.385714 x_6	-6.314286 x_7	+7.342857 x_8	-2.685714 x_9	+3
x_{17}	5.79714285714	+5.995714 x_1	-0.985714 x_{13}	+4.691429 x_3	+9.141429 x_4	+3.707143 x_5	+7.651429 x_6	-6.118571 x_7	+3.025714 x_8	+8.478571 x_9	-0
x_{18}	7.68571428571	+0.178571 x_1	+1.071429 x_{13}	-2.842857 x_3	+0.7143 x_4	-0.364286 x_5	-4.642857 x_6	-0.692857 x_7	-2.471429 x_8	+2.992857 x_9	+11
x_{19}	6.16	+4.49 x_1	-0.30 x_{13}	-2.32 x_3	+8.93 x_4	-5.15 x_5	+3.72 x_6	+2.29 x_7	-2.54 x_8	-0.15 x_9	-
x_{20}	1.16571428571	-6.101429 x_1	+0.671429 x_{13}	-4.202857 x_3	-5.852857 x_4	+1.635714 x_5	-7.882857 x_6	-4.472857 x_7	-8.891429 x_8	-7.907143 x_9	+10
x_{21}	4.02285714286	-4.215714 x_1	-0.614286 x_{13}	+5.768571 x_3	+6.118571 x_4	-4.307143 x_5	-2.911429 x_6	+1.998571 x_7	+10.194286 x_8	+3.321429 x_9	-12
x_{22}	2.42	+7.13 x_1	+0.90 x_{13}	+0.96 x_3	-7.49 x_4	-6.35 x_5	+0.94 x_6	-8.97 x_7	-8.68 x_8	+2.65 x_9	+
x_{23}	8.22857142857	+7.942857 x_1	-0.142857 x_{13}	-0.614286 x_3	+7.085714 x_4	+7.528571 x_5	-2.414286 x_6	-6.214286 x_7	+5.242857 x_8	-5.385714 x_9	-2
x_{24}	8.85142857143	-7.122857 x_1	+0.742857 x_{13}	-13.345714 x_3	-2.445714 x_4	+1.971429 x_5	-1.525714 x_6	+2.134286 x_7	+4.037143 x_8	-1.714286 x_9	+11
x_{25}	0.182857142857	-5.775714 x_1	-0.414286 x_{13}	+9.748571 x_3	+2.198571 x_4	+1.892857 x_5	+0.808571 x_6	+3.838571 x_7	+1.254286 x_8	+6.921429 x_9	-9
x_{26}	6.85714285714	-3.614286 x_1	-0.285714 x_{13}	+8.671429 x_3	-1.428571 x_4	+4.757143 x_5	+0.971429 x_6	-6.828571 x_7	-3.614286 x_8	-5.771429 x_9	+1
x_{27}	7.64857142857	-4.127143 x_1	-0.242857 x_{13}	+6.045714 x_3	+7.295714 x_4	+0.778571 x_5	+3.525714 x_6	+1.215714 x_7	+1.362857 x_8	+0.664286 x_9	-4
x_{28}	9.61428571429	-0.978571 x_1	+0.928571 x_{13}	-2.357143 x_3	-5.307143 x_4	-0.335714 x_5	-1.357143 x_6	-8.907143 x_7	-9.628571 x_8	+1.407143 x_9	+0
x_{29}	2.95714285714	+7.935714 x_1	+0.214286 x_{13}	-9.228571 x_3	+3.221429 x_4	-5.792857 x_5	+3.371429 x_6	+4.421429 x_7	-1.814286 x_8	-7.621429 x_9	+3
x_{30}	9.58	-0.93 x_1	+0.10 x_{13}	-8.06 x_3	-1.71 x_4	+7.75 x_5	-0.34 x_6	-1.83 x_7	+6.68 x_8	+1.45 x_9	-
x_{31}	9.49142857143	-7.612857 x_1	+1.042857 x_{13}	-3.025714 x_3	+2.624286 x_4	+8.221429 x_5	-9.845714 x_6	+4.844286 x_7	-11.522857 x_8	-8.464286 x_9	+1
z	0.0828571428571	-2.175714 x_1	-0.414286 x_{13}	+5.448571 x_3	+6.298571 x_4	-2.907143 x_5	-0.391429 x_6	+1.438571 x_7	+5.554286 x_8	-0.978571 x_9	-7