x_8	15.0	$-1.000000x_1$	$-2.000000x_2$	$-3.000000x_3$		$-2.000000x_5$	$-1.000000x_6$	$-1.000000x_7$
x_9	10.0	$-2.000000x_1$		$+2.000000x_3$	$-1.000000x_4$	$+1.000000x_5$	$-2.000000x_6$	$-3.000000x_7$
x_{10}	1.0		$+3.000000x_2$	$+3.000000x_3$	$-1.000000x_4$	$-1.000000x_5$	$+3.000000x_6$	$-1.000000x_7$
x_{11}	15.0	$+3.000000x_1$		$-2.000000x_3$	$-2.000000x_4$	$-2.000000x_5$	$+3.000000x_6$	$+2.000000x_7$
x_{12}	12.0	$-1.000000x_1$	$+2.000000x_2$	$-3.000000x_3$	$+3.000000x_4$	$+2.000000x_5$	$-1.000000x_6$	$-2.000000x_7$
x_{13}	6.0	$-3.000000x_1$	$-1.000000x_2$	$+1.000000x_3$	$+1.000000x_4$	$-1.000000x_5$	$+2.000000x_6$	
x_{14}	12.0	$+3.000000x_1$	$-1.000000x_2$	$+1.000000x_3$	$-1.000000x_4$	$-2.000000x_5$	$+1.000000x_6$	$-3.000000x_7$
x_{15}	9.0	$+1.000000x_1$	$-2.000000x_2$	$-3.000000x_3$	$-2.000000x_4$	$-2.000000x_5$	$+1.000000x_6$	$+3.000000x_7$
x_{16}	7.0	$+1.000000x_1$	$+1.000000x_2$	$+2.000000x_3$	$+2.000000x_4$	$+3.000000x_5$	$-2.000000x_6$	$+3.000000x_7$
x_{17}	14.0	$+3.000000x_1$	$-3.000000x_2$	$+1.000000x_3$	$+2.000000x_4$	$+2.000000x_5$	$+2.000000x_6$	$-2.000000x_7$
z	0.0	$-1.000000x_1$	$-1.000000x_2$	$-1.000000x_3$	$-2.000000x_4$	$-2.000000x_5$	$+1.000000x_6$	$+2.000000x_7$

No initialization required $-¿$ Proceed to Optimize.

x_8	15.0	$-1.000000x_1$	$-2.000000x_2$	$-3.000000x_3$		$-2.000000x_5$	$-1.000000x_6$	$-1.000000x_7$
x_9	10.0	$-2.000000x_1$		$+2.000000x_3$	$-1.000000x_4$	$+1.000000x_5$	$-2.000000x_6$	$-3.000000x_7$
x_{10}	1.0		$+3.000000x_2$	$+3.000000x_3$	$-1.000000x_4$	$-1.000000x_5$	$+3.000000x_6$	$-1.000000x_7$
x_{11}	15.0	$+3.000000x_1$		$-2.000000x_3$	$-2.000000x_4$	$-2.000000x_5$	$+3.000000x_6$	$+2.000000x_7$
x_{12}	12.0	$-1.000000x_1$	$+2.000000x_2$	$-3.000000x_3$	$+3.000000x_4$	$+2.000000x_5$	$-1.000000x_6$	$-2.000000x_7$
x_{13}	6.0	$-3.000000x_1$	$-1.000000x_2$	$+1.000000x_3$	$+1.000000x_4$	$-1.000000x_5$	$+2.000000x_6$	
x_{14}	12.0	$+3.000000x_1$	$-1.000000x_2$	$+1.000000x_3$	$-1.000000x_4$	$-2.000000x_5$	$+1.000000x_6$	$-3.000000x_7$
x_{15}	9.0	$+1.000000x_1$	$-2.000000x_2$	$-3.000000x_3$	$-2.000000x_4$	$-2.000000x_5$	$+1.000000x_6$	$+3.000000x_7$
x_{16}	7.0	$+1.000000x_1$	$+1.000000x_2$	$+2.000000x_3$	$+2.000000x_4$	$+3.000000x_5$	$-2.000000x_6$	$+3.000000x_7$
x_{17}	14.0	$+3.000000x_1$	$-3.000000x_2$	$+1.000000x_3$	$+2.000000x_4$	$+2.000000x_5$	$+2.000000x_6$	$-2.000000x_7$
z	0.0	$-1.000000x_1$	$-1.000000x_2$	$-1.000000x_3$	$-2.000000x_4$	$-2.000000x_5$	$+1.000000x_6$	$+2.000000x_7$

x_6 enters and x_{16} leaves

x_8	11.5	$-1.500000x_1$	$-2.500000x_2$	$-4.000000x_3$	$-1.000000x_4$	$-3.500000x_5$	$+0.500000x_{16}$	$-2.500000x_7$
x_9	3.0	$-3.000000x_1$	$-1.000000x_2$		$-3.000000x_4$	$-2.000000x_5$	$+1.000000x_{16}$	$-6.000000x_7$
x_{10}	11.5	$+1.500000x_1$	$+4.500000x_2$	$+6.000000x_3$	$+2.000000x_4$	$+3.500000x_5$	$-1.500000x_{16}$	$+3.500000x_7$
x_{11}	25.5	$+4.500000x_1$	$+1.500000x_2$	$+1.000000x_3$	$+1.000000x_4$	$+2.500000x_5$	$-1.500000x_{16}$	$+6.500000x_7$
x_{12}	8.5	$-1.500000x_1$	$+1.500000x_2$	$-4.000000x_3$	$+2.000000x_4$	$+0.500000x_5$	$+0.500000x_{16}$	$-3.500000x_7$
x_{13}	13.0	$-2.000000x_1$		$+3.000000x_3$	$+3.000000x_4$	$+2.000000x_5$	$-1.000000x_{16}$	$+3.000000x_7$
x_{14}	15.5	$+3.500000x_1$	$-0.500000x_2$	$+2.000000x_3$		$-0.500000x_5$	$-0.500000x_{16}$	$-1.500000x_7$
x_{15}	12.5	$+1.500000x_1$	$-1.500000x_2$	$-2.000000x_3$	$-1.000000x_4$	$-0.500000x_5$	$-0.500000x_{16}$	$+4.500000x_7$
x_6	3.5	$+0.500000x_1$	$+0.500000x_2$	$+1.000000x_3$	$+1.000000x_4$	$+1.500000x_5$	$-0.500000x_{16}$	$+1.500000x_7$
x_{17}	21.0	$+4.000000x_1$	$-2.000000x_2$	$+3.000000x_3$	$+4.000000x_4$	$+5.000000x_5$	$-1.000000x_{16}$	$+1.000000x_7$
z	3.5	$-0.500000x_1$	$-0.500000x_2$		$-1.000000x_4$	$-0.500000x_5$	$-0.500000x_{16}$	$+3.500000x_7$

x_7 enters and x_9 leaves

$$x_8 \quad | \quad 10.25 \quad -0.250000x_1 \; -2.083333x_2 \; -4.000000x_3 \; +0.250000x_4 \; -2.666667x_5 \; +0.083333x_{16} \; +0.416667x_9$$
$$x_7 \quad | \quad 0.5 \quad -0.500000x_1 \; -0.166667x_2 \qquad\qquad -0.500000x_4 \; -0.333333x_5 \; +0.166667x_{16} \; -0.166667x_9$$
$$x_{10} \quad | \quad 13.25 \quad -0.250000x_1 \; +3.916667x_2 \; +6.000000x_3 \; +0.250000x_4 \; +2.333333x_5 \; -0.916667x_{16} \; -0.583333x_9$$
$$x_{11} \quad | \quad 28.75 \quad +1.250000x_1 \; +0.416667x_2 \; +1.000000x_3 \; -2.250000x_4 \; +0.333333x_5 \; -0.416667x_{16} \; -1.083333x_9$$
$$x_{12} \quad | \quad 6.75 \quad +0.250000x_1 \; +2.083333x_2 \; -4.000000x_3 \; +3.750000x_4 \; +1.666667x_5 \; -0.083333x_{16} \; +0.583333x_9$$
$$x_{13} \quad | \quad 14.5 \quad -3.500000x_1 \; -0.500000x_2 \; +3.000000x_3 \; +1.500000x_4 \; +1.000000x_5 \; -0.500000x_{16} \; -0.500000x_9$$
$$x_{14} \quad | \quad 14.75 \quad +4.250000x_1 \; -0.250000x_2 \; +2.000000x_3 \; +0.750000x_4 \qquad\qquad -0.750000x_{16} \; +0.250000x_9$$
$$x_{15} \quad | \quad 14.75 \quad -0.750000x_1 \; -2.250000x_2 \; -2.000000x_3 \; -3.250000x_4 \; -2.000000x_5 \; +0.250000x_{16} \; -0.750000x_9$$
$$x_6 \quad | \quad 4.25 \quad -0.250000x_1 \; +0.250000x_2 \; +1.000000x_3 \; +0.250000x_4 \; +1.000000x_5 \; -0.250000x_{16} \; -0.250000x_9$$
$$x_{17} \quad | \quad 21.5 \quad +3.500000x_1 \; -2.166667x_2 \; +3.000000x_3 \; +3.500000x_4 \; +4.666667x_5 \; -0.833333x_{16} \; -0.166667x_9$$
$$z \quad | \quad 5.25 \quad -2.250000x_1 \; -1.083333x_2 \qquad\qquad -2.750000x_4 \; -1.666667x_5 \; +0.083333x_{16} \; -0.583333x_9$$

x_{16} enters and x_{10} leaves

$$x_8 \quad | \quad 11.4545454545 \quad -0.272727x_1 \; -1.727273x_2 \; -3.454545x_3 \; +0.272727x_4 \; -2.454545x_5 \; -0.090909x_{10} \; +0.363636x_9$$
$$x_7 \quad | \quad 2.90909090909 \quad -0.545455x_1 \; +0.545455x_2 \; +1.090909x_3 \; -0.454545x_4 \; +0.090909x_5 \; -0.181818x_{10} \; -0.272727x_9$$
$$x_{16} \quad | \quad 14.4545454545 \quad -0.272727x_1 \; +4.272727x_2 \; +6.545455x_3 \; +0.272727x_4 \; +2.545455x_5 \; -1.090909x_{10} \; -0.636364x_9$$
$$x_{11} \quad | \quad 22.7272727273 \quad +1.363636x_1 \; -1.363636x_2 \; -1.727273x_3 \; -2.363636x_4 \; -0.727273x_5 \; +0.454545x_{10} \; -0.818182x_9$$
$$x_{12} \quad | \quad 5.54545454545 \quad +0.272727x_1 \; +1.727273x_2 \; -4.545455x_3 \; +3.727273x_4 \; +1.454545x_5 \; +0.090909x_{10} \; +0.636364x_9$$
$$x_{13} \quad | \quad 7.27272727273 \quad -3.363636x_1 \; -2.636364x_2 \; -0.272727x_3 \; +1.363636x_4 \; -0.272727x_5 \; +0.545455x_{10} \; -0.181818x_9$$
$$x_{14} \quad | \quad 3.90909090909 \quad +4.454545x_1 \; -3.454545x_2 \; -2.909091x_3 \; +0.545455x_4 \; -1.909091x_5 \; +0.818182x_{10} \; +0.727273x_9$$
$$x_{15} \quad | \quad 18.3636363636 \quad -0.818182x_1 \; -1.181818x_2 \; -0.363636x_3 \; -3.181818x_4 \; -1.363636x_5 \; -0.272727x_{10} \; -0.909091x_9$$
$$x_6 \quad | \quad 0.636363636364 \quad -0.181818x_1 \; -0.818182x_2 \; -0.636364x_3 \; +0.181818x_4 \; +0.363636x_5 \; +0.272727x_{10} \; -0.090909x_9$$
$$x_{17} \quad | \quad 9.45454545455 \quad +3.727273x_1 \; -5.727273x_2 \; -2.454545x_3 \; +3.272727x_4 \; +2.545455x_5 \; +0.909091x_{10} \; +0.363636x_9$$
$$z \quad | \quad 6.45454545455 \quad -2.272727x_1 \; -0.727273x_2 \; +0.545455x_3 \; -2.727273x_4 \; -1.454545x_5 \; -0.090909x_{10} \; -0.636364x_9$$

x_3 enters and x_6 leaves

$$x_8 \quad | \quad 8.0 \quad +0.714286x_1 \; +2.714286x_2 \; +5.428571x_6 \; -0.714286x_4 \; -4.428571x_5 \; -1.571429x_{10} \; +0.857143x_9$$
$$x_7 \quad | \quad 4.0 \quad -0.857143x_1 \; -0.857143x_2 \; -1.714286x_6 \; -0.142857x_4 \; +0.714286x_5 \; +0.285714x_{10} \; -0.428571x_9$$
$$x_{16} \quad | \quad 21.0 \quad -2.142857x_1 \; -4.142857x_2 \; -10.285714x_6 \; +2.142857x_4 \; +6.285714x_5 \; +1.714286x_{10} \; -1.571429x_9$$
$$x_{11} \quad | \quad 21.0 \quad +1.857143x_1 \; +0.857143x_2 \; +2.714286x_6 \; -2.857143x_4 \; -1.714286x_5 \; -0.285714x_{10} \; -0.571429x_9$$
$$x_{12} \quad | \quad 1.0 \quad +1.571429x_1 \; +7.571429x_2 \; +7.142857x_6 \; +2.428571x_4 \; -1.142857x_5 \; -1.857143x_{10} \; +1.285714x_9$$
$$x_{13} \quad | \quad 7.0 \quad -3.285714x_1 \; -2.285714x_2 \; +0.428571x_6 \; +1.285714x_4 \; -0.428571x_5 \; +0.428571x_{10} \; -0.142857x_9$$
$$x_{14} \quad | \quad 1.0 \quad +5.285714x_1 \; +0.285714x_2 \; +4.571429x_6 \; -0.285714x_4 \; -3.571429x_5 \; -0.428571x_{10} \; +1.142857x_9$$
$$x_{15} \quad | \quad 18.0 \quad -0.714286x_1 \; -0.714286x_2 \; +0.571429x_6 \; -3.285714x_4 \; -1.571429x_5 \; -0.428571x_{10} \; -0.857143x_9$$
$$x_3 \quad | \quad 1.0 \quad -0.285714x_1 \; -1.285714x_2 \; -1.571429x_6 \; +0.285714x_4 \; +0.571429x_5 \; +0.428571x_{10} \; -0.142857x_9$$
$$x_{17} \quad | \quad 7.0 \quad +4.428571x_1 \; -2.571429x_2 \; +3.857143x_6 \; +2.571429x_4 \; +1.142857x_5 \; -0.142857x_{10} \; +0.714286x_9$$
$$z \quad | \quad 7.0 \quad -2.428571x_1 \; -1.428571x_2 \; -0.857143x_6 \; -2.571429x_4 \; -1.142857x_5 \; +0.142857x_{10} \; -0.714286x_9$$

x_{10} enters and x_{12} leaves

2

$$
\begin{array}{r|lllllllll}
x_8 & 7.15384615385 & -0.615385x_1 & -3.692308x_2 & -0.615385x_6 & -2.769231x_4 & -3.461538x_5 & +0.846154x_{12} & -0.230769x_9 \\
x_7 & 4.15384615385 & -0.615385x_1 & +0.307692x_2 & -0.615385x_6 & +0.230769x_4 & +0.538462x_5 & -0.153846x_{12} & -0.230769x_9 \\
x_{16} & 21.9230769231 & -0.692308x_1 & +2.846154x_2 & -3.692308x_6 & +4.384615x_4 & +5.230769x_5 & -0.923077x_{12} & -0.384615x_9 \\
x_{11} & 20.8461538462 & +1.615385x_1 & -0.307692x_2 & +1.615385x_6 & -3.230769x_4 & -1.538462x_5 & +0.153846x_{12} & -0.769231x_9 \\
x_{10} & 0.538461538462 & +0.846154x_1 & +4.076923x_2 & +3.846154x_6 & +1.307692x_4 & -0.615385x_5 & -0.538462x_{12} & +0.692308x_9 \\
x_{13} & 7.23076923077 & -2.923077x_1 & -0.538462x_2 & +2.076923x_6 & +1.846154x_4 & -0.692308x_5 & -0.230769x_{12} & +0.153846x_9 \\
x_{14} & 0.769230769231 & +4.923077x_1 & -1.461538x_2 & +2.923077x_6 & -0.846154x_4 & -3.307692x_5 & +0.230769x_{12} & +0.846154x_9 \\
x_{15} & 17.7692307692 & -1.076923x_1 & -2.461538x_2 & -1.076923x_6 & -3.846154x_4 & -1.307692x_5 & +0.230769x_{12} & -1.153846x_9 \\
x_3 & 1.23076923077 & +0.076923x_1 & +0.461538x_2 & +0.076923x_6 & +0.846154x_4 & +0.307692x_5 & -0.230769x_{12} & +0.153846x_9 \\
x_{17} & 6.92307692308 & +4.307692x_1 & -3.153846x_2 & +3.307692x_6 & +2.384615x_4 & +1.230769x_5 & +0.076923x_{12} & +0.615385x_9 \\
\hline
z & 7.07692307692 & -2.307692x_1 & -0.846154x_2 & -0.307692x_6 & -2.384615x_4 & -1.230769x_5 & -0.076923x_{12} & -0.615385x_9 \\
\end{array}
$$

x_{-1} enters and Final Dictionary Solution: 7.07692307692 Num Pivots: 5