$$
\begin{array}{c|l}
x_8 & 5.0 \quad -3.000000x_1 -1.000000x_2 -1.000000x_3 +2.000000x_4 -2.000000x_5 +3.000000x_6 -3.000000x_7 \\
x_9 & 8.0 \quad +2.000000x_1 -2.000000x_2 -3.000000x_3 -2.000000x_4 +2.000000x_5 +2.000000x_6 +2.000000x_7 \\
x_{10} & 12.0 \quad -1.000000x_1 \qquad\qquad\qquad +1.000000x_4 +3.000000x_5 +3.000000x_6 \\
x_{11} & 7.0 \qquad\qquad -1.000000x_2 +2.000000x_3 \qquad +3.000000x_5 +2.000000x_6 -1.000000x_7 \\
x_{12} & 7.0 \qquad\qquad +3.000000x_2 +1.000000x_3 \qquad -1.000000x_5 +1.000000x_6 +1.000000x_7 \\
x_{13} & 10.0 \quad +1.000000x_1 \qquad\qquad\qquad +3.000000x_4 \qquad -2.000000x_6 +3.000000x_7 \\
x_{14} & 1.0 \quad -3.000000x_1 -3.000000x_2 -2.000000x_3 -1.000000x_4 \qquad\qquad +1.000000x_7 \\
x_{15} & 10.0 \quad -1.000000x_1 -2.000000x_2 +1.000000x_3 +3.000000x_4 -2.000000x_5 +3.000000x_6 -3.000000x_7 \\
x_{16} & 1.0 \quad +3.000000x_1 +2.000000x_2 -2.000000x_3 -1.000000x_4 +2.000000x_5 -2.000000x_6 -3.000000x_7 \\
x_{17} & 5.0 \qquad\qquad +3.000000x_2 -3.000000x_3 -1.000000x_4 +2.000000x_5 \qquad -2.000000x_7 \\
\hline
z & 0.0 \quad +2.000000x_1 -1.000000x_2 +2.000000x_3 +1.000000x_4 -2.000000x_5 +2.000000x_6 -1.000000x_7
\end{array}
$$

No initialization required –¿ Proceed to Optimize.

$$
\begin{array}{c|l}
x_8 & 5.0 \quad -3.000000x_1 -1.000000x_2 -1.000000x_3 +2.000000x_4 -2.000000x_5 +3.000000x_6 -3.000000x_7 \\
x_9 & 8.0 \quad +2.000000x_1 -2.000000x_2 -3.000000x_3 -2.000000x_4 +2.000000x_5 +2.000000x_6 +2.000000x_7 \\
x_{10} & 12.0 \quad -1.000000x_1 \qquad\qquad\qquad +1.000000x_4 +3.000000x_5 +3.000000x_6 \\
x_{11} & 7.0 \qquad\qquad -1.000000x_2 +2.000000x_3 \qquad +3.000000x_5 +2.000000x_6 -1.000000x_7 \\
x_{12} & 7.0 \qquad\qquad +3.000000x_2 +1.000000x_3 \qquad -1.000000x_5 +1.000000x_6 +1.000000x_7 \\
x_{13} & 10.0 \quad +1.000000x_1 \qquad\qquad\qquad +3.000000x_4 \qquad -2.000000x_6 +3.000000x_7 \\
x_{14} & 1.0 \quad -3.000000x_1 -3.000000x_2 -2.000000x_3 -1.000000x_4 \qquad\qquad +1.000000x_7 \\
x_{15} & 10.0 \quad -1.000000x_1 -2.000000x_2 +1.000000x_3 +3.000000x_4 -2.000000x_5 +3.000000x_6 -3.000000x_7 \\
x_{16} & 1.0 \quad +3.000000x_1 +2.000000x_2 -2.000000x_3 -1.000000x_4 +2.000000x_5 -2.000000x_6 -3.000000x_7 \\
x_{17} & 5.0 \qquad\qquad +3.000000x_2 -3.000000x_3 -1.000000x_4 +2.000000x_5 \qquad -2.000000x_7 \\
\hline
z & 0.0 \quad +2.000000x_1 -1.000000x_2 +2.000000x_3 +1.000000x_4 -2.000000x_5 +2.000000x_6 -1.000000x_7
\end{array}
$$

x_1 enters and x_{14} leaves

$$
\begin{array}{c|l}
x_8 & 4.0 \quad +1.000000x_{14} +2.000000x_2 +1.000000x_3 +3.000000x_4 -2.000000x_5 +3.000000x_6 -4.000000x_7 \\
x_9 & 8.66666666667 \quad -0.666667x_{14} -4.000000x_2 -4.333333x_3 -2.666667x_4 +2.000000x_5 +2.000000x_6 +2.666667x_7 \\
x_{10} & 11.6666666667 \quad +0.333333x_{14} +1.000000x_2 +0.666667x_3 +1.333333x_4 +3.000000x_5 +3.000000x_6 -0.333333x_7 \\
x_{11} & 7.0 \qquad\qquad -1.000000x_2 +2.000000x_3 \qquad +3.000000x_5 +2.000000x_6 -1.000000x_7 \\
x_{12} & 7.0 \qquad\qquad +3.000000x_2 +1.000000x_3 \qquad -1.000000x_5 +1.000000x_6 +1.000000x_7 \\
x_{13} & 10.3333333333 \quad -0.333333x_{14} -1.000000x_2 -0.666667x_3 +2.666667x_4 \qquad -2.000000x_6 +3.333333x_7 \\
x_1 & 0.333333333333 \quad -0.333333x_{14} -1.000000x_2 -0.666667x_3 -0.333333x_4 \qquad\qquad +0.333333x_7 \\
x_{15} & 9.66666666667 \quad +0.333333x_{14} -1.000000x_2 +1.666667x_3 +3.333333x_4 -2.000000x_5 +3.000000x_6 -3.333333x_7 \\
x_{16} & 2.0 \quad -1.000000x_{14} -1.000000x_2 -4.000000x_3 -2.000000x_4 +2.000000x_5 -2.000000x_6 -2.000000x_7 \\
x_{17} & 5.0 \qquad\qquad +3.000000x_2 -3.000000x_3 -1.000000x_4 +2.000000x_5 \qquad -2.000000x_7 \\
\hline
z & 0.666666666667 \quad -0.666667x_{14} -3.000000x_2 +0.666667x_3 +0.333333x_4 -2.000000x_5 +2.000000x_6 -0.333333x_7
\end{array}
$$

x_3 enters and x_1 leaves

1

x_8	4.5	$+0.500000x_{14}$	$+0.500000x_2$	$-1.500000x_1$	$+2.500000x_4$	$-2.000000x_5$	$+3.000000x_6$	$-3.500000x_7$
x_9	6.5	$+1.500000x_{14}$	$+2.500000x_2$	$+6.500000x_1$	$-0.500000x_4$	$+2.000000x_5$	$+2.000000x_6$	$+0.500000x_7$
x_{10}	12.0			$-1.000000x_1$	$+1.000000x_4$	$+3.000000x_5$	$+3.000000x_6$	
x_{11}	8.0	$-1.000000x_{14}$	$-4.000000x_2$	$-3.000000x_1$	$-1.000000x_4$	$+3.000000x_5$	$+2.000000x_6$	
x_{12}	7.5	$-0.500000x_{14}$	$+1.500000x_2$	$-1.500000x_1$	$-0.500000x_4$	$-1.000000x_5$	$+1.000000x_6$	$+1.500000x_7$
x_{13}	10.0			$+1.000000x_1$	$+3.000000x_4$		$-2.000000x_6$	$+3.000000x_7$
x_3	0.5	$-0.500000x_{14}$	$-1.500000x_2$	$-1.500000x_1$	$-0.500000x_4$			$+0.500000x_7$
x_{15}	10.5	$-0.500000x_{14}$	$-3.500000x_2$	$-2.500000x_1$	$+2.500000x_4$	$-2.000000x_5$	$+3.000000x_6$	$-2.500000x_7$
x_{16}	0.0	$+1.000000x_{14}$	$+5.000000x_2$	$+6.000000x_1$		$+2.000000x_5$	$-2.000000x_6$	$-4.000000x_7$
x_{17}	3.5	$+1.500000x_{14}$	$+7.500000x_2$	$+4.500000x_1$	$+0.500000x_4$	$+2.000000x_5$		$-3.500000x_7$
z	1.0	$-1.000000x_{14}$	$-4.000000x_2$	$-1.000000x_1$		$-2.000000x_5$	$+2.000000x_6$	

x_6 enters and x_{16} leaves

x_8	4.5	$+2.000000x_{14}$	$+8.000000x_2$	$+7.500000x_1$	$+2.500000x_4$	$+1.000000x_5$	$-1.500000x_{16}$	$-9.500000x_7$
x_9	6.5	$+2.500000x_{14}$	$+7.500000x_2$	$+12.500000x_1$	$-0.500000x_4$	$+4.000000x_5$	$-1.000000x_{16}$	$-3.500000x_7$
x_{10}	12.0	$+1.500000x_{14}$	$+7.500000x_2$	$+8.000000x_1$	$+1.000000x_4$	$+6.000000x_5$	$-1.500000x_{16}$	$-6.000000x_7$
x_{11}	8.0		$+1.000000x_2$	$+3.000000x_1$	$-1.000000x_4$	$+5.000000x_5$	$-1.000000x_{16}$	$-4.000000x_7$
x_{12}	7.5		$+4.000000x_2$	$+1.500000x_1$	$-0.500000x_4$		$-0.500000x_{16}$	$-0.500000x_7$
x_{13}	10.0	$-1.000000x_{14}$	$-5.000000x_2$	$-5.000000x_1$	$+3.000000x_4$	$-2.000000x_5$	$+1.000000x_{16}$	$+7.000000x_7$
x_3	0.5	$-0.500000x_{14}$	$-1.500000x_2$	$-1.500000x_1$	$-0.500000x_4$			$+0.500000x_7$
x_{15}	10.5	$+1.000000x_{14}$	$+4.000000x_2$	$+6.500000x_1$	$+2.500000x_4$	$+1.000000x_5$	$-1.500000x_{16}$	$-8.500000x_7$
x_6	0.0	$+0.500000x_{14}$	$+2.500000x_2$	$+3.000000x_1$		$+1.000000x_5$	$-0.500000x_{16}$	$-2.000000x_7$
x_{17}	3.5	$+1.500000x_{14}$	$+7.500000x_2$	$+4.500000x_1$	$+0.500000x_4$	$+2.000000x_5$		$-3.500000x_7$
z	1.0		$+1.000000x_2$	$+5.000000x_1$			$-1.000000x_{16}$	$-4.000000x_7$

x_1 enters and x_3 leaves

x_8	7.0	$-0.500000x_{14}$	$+0.500000x_2$	$-5.000000x_3$		$+1.000000x_5$	$-1.500000x_{16}$	$-7.000000x_7$
x_9	10.6666666667	$-1.666667x_{14}$	$-5.000000x_2$	$-8.333333x_3$	$-4.666667x_4$	$+4.000000x_5$	$-1.000000x_{16}$	$+0.666667x_7$
x_{10}	14.6666666667	$-1.166667x_{14}$	$-0.500000x_2$	$-5.333333x_3$	$-1.666667x_4$	$+6.000000x_5$	$-1.500000x_{16}$	$-3.333333x_7$
x_{11}	9.0	$-1.000000x_{14}$	$-2.000000x_2$	$-2.000000x_3$	$-2.000000x_4$	$+5.000000x_5$	$-1.000000x_{16}$	$-3.000000x_7$
x_{12}	8.0	$-0.500000x_{14}$	$+2.500000x_2$	$-1.000000x_3$	$-1.000000x_4$		$-0.500000x_{16}$	
x_{13}	8.33333333333	$+0.666667x_{14}$		$+3.333333x_3$	$+4.666667x_4$	$-2.000000x_5$	$+1.000000x_{16}$	$+5.333333x_7$
x_1	0.333333333333	$-0.333333x_{14}$	$-1.000000x_2$	$-0.666667x_3$	$-0.333333x_4$			$+0.333333x_7$
x_{15}	12.6666666667	$-1.166667x_{14}$	$-2.500000x_2$	$-4.333333x_3$	$+0.333333x_4$	$+1.000000x_5$	$-1.500000x_{16}$	$-6.333333x_7$
x_6	1.0	$-0.500000x_{14}$	$-0.500000x_2$	$-2.000000x_3$	$-1.000000x_4$	$+1.000000x_5$	$-0.500000x_{16}$	$-1.000000x_7$
x_{17}	5.0		$+3.000000x_2$	$-3.000000x_3$	$-1.000000x_4$	$+2.000000x_5$		$-2.000000x_7$
z	2.66666666667	$-1.666667x_{14}$	$-4.000000x_2$	$-3.333333x_3$	$-1.666667x_4$		$-1.000000x_{16}$	$-2.333333x_7$

x_{-1} enters and Final Dictionary Solution: 2.66666666667 Num Pivots: 4