$$
\begin{array}{c|l l}
x_8 & 7.0 & +3.000000x_1 +2.000000x_2 +3.000000x_3 +2.000000x_4 +3.000000x_5 \qquad\qquad +1.000000x_7 \\
x_9 & 5.0 & -1.000000x_1 +2.000000x_2 -2.000000x_3 +1.000000x_4 +1.000000x_5 +3.000000x_6 +1.000000x_7 \\
x_{10} & 1.0 & -2.000000x_1 -1.000000x_2 \qquad\qquad +3.000000x_4 -1.000000x_5 -1.000000x_6 -3.000000x_7 \\
x_{11} & 11.0 & \qquad\qquad +2.000000x_2 +1.000000x_3 -2.000000x_4 -2.000000x_5 -3.000000x_6 -1.000000x_7 \\
x_{12} & 10.0 & +3.000000x_1 +2.000000x_2 \qquad\qquad +1.000000x_4 -2.000000x_5 +1.000000x_6 \\
x_{13} & 9.0 & -1.000000x_1 -3.000000x_2 \qquad\qquad +3.000000x_4 -3.000000x_5 -3.000000x_6 +2.000000x_7 \\
x_{14} & 14.0 & +3.000000x_1 \qquad\qquad +3.000000x_3 +2.000000x_4 +2.000000x_5 \qquad\qquad +1.000000x_7 \\
x_{15} & 5.0 & +1.000000x_1 \qquad\qquad\qquad\qquad +2.000000x_4 \qquad\qquad -1.000000x_6 +1.000000x_7 \\
x_{16} & 4.0 & -1.000000x_1 -2.000000x_2 -1.000000x_3 \qquad\qquad +3.000000x_5 -1.000000x_6 -3.000000x_7 \\
x_{17} & 15.0 & -3.000000x_1 +2.000000x_2 +1.000000x_3 +3.000000x_4 +2.000000x_5 \qquad\qquad +3.000000x_7 \\
\hline
z & 0.0 & \qquad\qquad\qquad\qquad\qquad\qquad +2.000000x_4 -2.000000x_5 +2.000000x_6 -2.000000x_7 \\
\end{array}
$$

No initialization required –¿ Proceed to Optimize.

$$
\begin{array}{c|l l}
x_8 & 7.0 & +3.000000x_1 +2.000000x_2 +3.000000x_3 +2.000000x_4 +3.000000x_5 \qquad\qquad +1.000000x_7 \\
x_9 & 5.0 & -1.000000x_1 +2.000000x_2 -2.000000x_3 +1.000000x_4 +1.000000x_5 +3.000000x_6 +1.000000x_7 \\
x_{10} & 1.0 & -2.000000x_1 -1.000000x_2 \qquad\qquad +3.000000x_4 -1.000000x_5 -1.000000x_6 -3.000000x_7 \\
x_{11} & 11.0 & \qquad\qquad +2.000000x_2 +1.000000x_3 -2.000000x_4 -2.000000x_5 -3.000000x_6 -1.000000x_7 \\
x_{12} & 10.0 & +3.000000x_1 +2.000000x_2 \qquad\qquad +1.000000x_4 -2.000000x_5 +1.000000x_6 \\
x_{13} & 9.0 & -1.000000x_1 -3.000000x_2 \qquad\qquad +3.000000x_4 -3.000000x_5 -3.000000x_6 +2.000000x_7 \\
x_{14} & 14.0 & +3.000000x_1 \qquad\qquad +3.000000x_3 +2.000000x_4 +2.000000x_5 \qquad\qquad +1.000000x_7 \\
x_{15} & 5.0 & +1.000000x_1 \qquad\qquad\qquad\qquad +2.000000x_4 \qquad\qquad -1.000000x_6 +1.000000x_7 \\
x_{16} & 4.0 & -1.000000x_1 -2.000000x_2 -1.000000x_3 \qquad\qquad +3.000000x_5 -1.000000x_6 -3.000000x_7 \\
x_{17} & 15.0 & -3.000000x_1 +2.000000x_2 +1.000000x_3 +3.000000x_4 +2.000000x_5 \qquad\qquad +3.000000x_7 \\
\hline
z & 0.0 & \qquad\qquad\qquad\qquad\qquad\qquad +2.000000x_4 -2.000000x_5 +2.000000x_6 -2.000000x_7 \\
\end{array}
$$

x_4 enters and x_{11} leaves

$$
\begin{array}{c|l l}
x_8 & 18.0 & +3.000000x_1 +4.000000x_2 +4.000000x_3 -1.000000x_{11} +1.000000x_5 -3.000000x_6 \\
x_9 & 10.5 & -1.000000x_1 +3.000000x_2 -1.500000x_3 -0.500000x_{11} \qquad\qquad +1.500000x_6 +0.500000x_7 \\
x_{10} & 17.5 & -2.000000x_1 +2.000000x_2 +1.500000x_3 -1.500000x_{11} -4.000000x_5 -5.500000x_6 -4.500000x_7 \\
x_4 & 5.5 & \qquad\qquad +1.000000x_2 +0.500000x_3 -0.500000x_{11} -1.000000x_5 -1.500000x_6 -0.500000x_7 \\
x_{12} & 15.5 & +3.000000x_1 +3.000000x_2 +0.500000x_3 -0.500000x_{11} -3.000000x_5 -0.500000x_6 -0.500000x_7 \\
x_{13} & 25.5 & -1.000000x_1 \qquad\qquad +1.500000x_3 -1.500000x_{11} -6.000000x_5 -7.500000x_6 +0.500000x_7 \\
x_{14} & 25.0 & +3.000000x_1 +2.000000x_2 +4.000000x_3 -1.000000x_{11} \qquad\qquad -3.000000x_6 \\
x_{15} & 16.0 & +1.000000x_1 +2.000000x_2 +1.000000x_3 -1.000000x_{11} -2.000000x_5 -4.000000x_6 \\
x_{16} & 4.0 & -1.000000x_1 -2.000000x_2 -1.000000x_3 \qquad\qquad +3.000000x_5 -1.000000x_6 -3.000000x_7 \\
x_{17} & 31.5 & -3.000000x_1 +5.000000x_2 +2.500000x_3 -1.500000x_{11} -1.000000x_5 -4.500000x_6 +1.500000x_7 \\
\hline
z & 11.0 & \qquad\qquad +2.000000x_2 +1.000000x_3 -1.000000x_{11} -4.000000x_5 -1.000000x_6 -3.000000x_7 \\
\end{array}
$$

x_2 enters and x_{16} leaves

x_8	26.0	$+1.000000x_1$	$-2.000000x_{16}$	$+2.000000x_3$	$-1.000000x_{11}$	$+7.000000x_5$	$-5.000000x_6$	$-6.000000x_7$
x_9	16.5	$-2.500000x_1$	$-1.500000x_{16}$	$-3.000000x_3$	$-0.500000x_{11}$	$+4.500000x_5$		$-4.000000x_7$
x_{10}	21.5	$-3.000000x_1$	$-1.000000x_{16}$	$+0.500000x_3$	$-1.500000x_{11}$	$-1.000000x_5$	$-6.500000x_6$	$-7.500000x_7$
x_4	7.5	$-0.500000x_1$	$-0.500000x_{16}$		$-0.500000x_{11}$	$+0.500000x_5$	$-2.000000x_6$	$-2.000000x_7$
x_{12}	21.5	$+1.500000x_1$	$-1.500000x_{16}$	$-1.000000x_3$	$-0.500000x_{11}$	$+1.500000x_5$	$-2.000000x_6$	$-5.000000x_7$
x_{13}	25.5	$-1.000000x_1$		$+1.500000x_3$	$-1.500000x_{11}$	$-6.000000x_5$	$-7.500000x_6$	$+0.500000x_7$
x_{14}	29.0	$+2.000000x_1$	$-1.000000x_{16}$	$+3.000000x_3$	$-1.000000x_{11}$	$+3.000000x_5$	$-4.000000x_6$	$-3.000000x_7$
x_{15}	20.0		$-1.000000x_{16}$		$-1.000000x_{11}$	$+1.000000x_5$	$-5.000000x_6$	$-3.000000x_7$
x_2	2.0	$-0.500000x_1$	$-0.500000x_{16}$	$-0.500000x_3$		$+1.500000x_5$	$-0.500000x_6$	$-1.500000x_7$
x_{17}	41.5	$-5.500000x_1$	$-2.500000x_{16}$		$-1.500000x_{11}$	$+6.500000x_5$	$-7.000000x_6$	$-6.000000x_7$
z	15.0	$-1.000000x_1$	$-1.000000x_{16}$		$-1.000000x_{11}$	$-1.000000x_5$	$-2.000000x_6$	$-6.000000x_7$

x_{-1} enters and Final Dictionary Solution: 15.0 Num Pivots: 2