

x_9	13.0	$-3.000000x_1 + 1.000000x_2 + 3.000000x_3 - 1.000000x_4$	$-1.000000x_6 + 2.000000x_7 - 1.000000x_8$
x_{10}	9.0	$+1.000000x_1 + 1.000000x_2$	$+3.000000x_4 + 1.000000x_5 - 1.000000x_6 + 1.000000x_7$
x_{11}	3.0	$-2.000000x_1 + 3.000000x_2 - 3.000000x_3 + 2.000000x_4$	$-3.000000x_6$
x_{12}	1.0	$-3.000000x_1$	$+2.000000x_3 + 3.000000x_4 + 3.000000x_5 - 3.000000x_6 + 1.000000x_7 + 3.000000x_8$
x_{13}	7.0	$+2.000000x_1 - 2.000000x_2 + 1.000000x_3 + 2.000000x_4$	$-2.000000x_7$
x_{14}	12.0	$+3.000000x_1$	$-2.000000x_3 - 3.000000x_4 + 3.000000x_5 + 1.000000x_6 + 2.000000x_7 + 2.000000x_8$
x_{15}	10.0	$-1.000000x_1 + 2.000000x_2 - 1.000000x_3 + 3.000000x_4 + 1.000000x_5 - 3.000000x_6 - 3.000000x_7 - 2.000000x_8$	
x_{16}	5.0	$-1.000000x_1 + 1.000000x_2$	$+3.000000x_5 - 2.000000x_6 - 3.000000x_7 - 3.000000x_8$
x_{17}	11.0	$-1.000000x_1 - 2.000000x_2 + 1.000000x_3 - 3.000000x_4 - 3.000000x_5 - 2.000000x_6$	$-1.000000x_8$
x_{18}	15.0		$-3.000000x_3 + 2.000000x_4 + 1.000000x_5 + 1.000000x_6$
x_{19}	13.0	$+1.000000x_1$	$-1.000000x_3 + 2.000000x_4 - 1.000000x_5 + 2.000000x_6 + 3.000000x_7 + 3.000000x_8$
x_{20}	7.0		$-1.000000x_2 + 3.000000x_3 - 3.000000x_4 - 2.000000x_5 + 2.000000x_6 - 3.000000x_8$
x_{21}	15.0	$-3.000000x_1 + 1.000000x_2 - 2.000000x_3 + 2.000000x_4$	$+2.000000x_6 + 2.000000x_7 + 1.000000x_8$
x_{22}	9.0		$+2.000000x_2 - 3.000000x_3 - 2.000000x_4 - 1.000000x_5 + 3.000000x_6 - 2.000000x_7 + 1.000000x_8$
x_{23}	11.0	$+3.000000x_1 + 3.000000x_2 - 2.000000x_3 - 1.000000x_4 + 1.000000x_5 + 1.000000x_6$	$-2.000000x_8$
z	0.0	$-2.000000x_2 - 2.000000x_3 - 2.000000x_4 + 1.000000x_5$	$-1.000000x_7 + 2.000000x_8$

No initialization required – Proceed to Optimize.

x_9	13.0	$-3.000000x_1 + 1.000000x_2 + 3.000000x_3 - 1.000000x_4$	$-1.000000x_6 + 2.000000x_7 - 1.000000x_8$
x_{10}	9.0	$+1.000000x_1 + 1.000000x_2$	$+3.000000x_4 + 1.000000x_5 - 1.000000x_6 + 1.000000x_7$
x_{11}	3.0	$-2.000000x_1 + 3.000000x_2 - 3.000000x_3 + 2.000000x_4$	$-3.000000x_6$
x_{12}	1.0	$-3.000000x_1$	$+2.000000x_3 + 3.000000x_4 + 3.000000x_5 - 3.000000x_6 + 1.000000x_7 + 3.000000x_8$
x_{13}	7.0	$+2.000000x_1 - 2.000000x_2 + 1.000000x_3 + 2.000000x_4$	$-2.000000x_7$
x_{14}	12.0	$+3.000000x_1$	$-2.000000x_3 - 3.000000x_4 + 3.000000x_5 + 1.000000x_6 + 2.000000x_7 + 2.000000x_8$
x_{15}	10.0	$-1.000000x_1 + 2.000000x_2 - 1.000000x_3 + 3.000000x_4 + 1.000000x_5 - 3.000000x_6 - 3.000000x_7 - 2.000000x_8$	
x_{16}	5.0	$-1.000000x_1 + 1.000000x_2$	$+3.000000x_5 - 2.000000x_6 - 3.000000x_7 - 3.000000x_8$
x_{17}	11.0	$-1.000000x_1 - 2.000000x_2 + 1.000000x_3 - 3.000000x_4 - 3.000000x_5 - 2.000000x_6$	$-1.000000x_8$
x_{18}	15.0		$-3.000000x_3 + 2.000000x_4 + 1.000000x_5 + 1.000000x_6$
x_{19}	13.0	$+1.000000x_1$	$-1.000000x_3 + 2.000000x_4 - 1.000000x_5 + 2.000000x_6 + 3.000000x_7 + 3.000000x_8$
x_{20}	7.0		$-1.000000x_2 + 3.000000x_3 - 3.000000x_4 - 2.000000x_5 + 2.000000x_6 - 3.000000x_8$
x_{21}	15.0	$-3.000000x_1 + 1.000000x_2 - 2.000000x_3 + 2.000000x_4$	$+2.000000x_6 + 2.000000x_7 + 1.000000x_8$
x_{22}	9.0		$+2.000000x_2 - 3.000000x_3 - 2.000000x_4 - 1.000000x_5 + 3.000000x_6 - 2.000000x_7 + 1.000000x_8$
x_{23}	11.0	$+3.000000x_1 + 3.000000x_2 - 2.000000x_3 - 1.000000x_4 + 1.000000x_5 + 1.000000x_6$	$-2.000000x_8$
z	0.0	$-2.000000x_2 - 2.000000x_3 - 2.000000x_4 + 1.000000x_5$	$-1.000000x_7 + 2.000000x_8$

x_5 enters and x_{20} leaves

x_9	13.0	$-3.000000x_1 + 1.000000x_2 + 3.000000x_3 - 1.000000x_4$	$-1.000000x_6 + 2.000000x_7 - 1.000000x_8$
x_{10}	12.5	$+1.000000x_1 + 0.500000x_2 + 1.500000x_3 + 1.500000x_4 - 0.500000x_{20}$	$+1.000000x_7 - 1.500000x_8$
x_{11}	3.0	$-2.000000x_1 + 3.000000x_2 - 3.000000x_3 + 2.000000x_4$	$-3.000000x_6$
x_{12}	11.5	$-3.000000x_1 - 1.500000x_2 + 6.500000x_3 - 1.500000x_4 - 1.500000x_{20}$	$+1.000000x_7 - 1.500000x_8$
x_{13}	7.0	$+2.000000x_1 - 2.000000x_2 + 1.000000x_3 + 2.000000x_4$	$-2.000000x_7$
x_{14}	22.5	$+3.000000x_1 - 1.500000x_2 + 2.500000x_3 - 7.500000x_4 - 1.500000x_{20} + 4.000000x_6 + 2.000000x_7 - 2.500000x_8$	
x_{15}	13.5	$-1.000000x_1 + 1.500000x_2 + 0.500000x_3 + 1.500000x_4 - 0.500000x_{20} - 2.000000x_6 - 3.000000x_7 - 3.500000x_8$	
x_{16}	15.5	$-1.000000x_1 - 0.500000x_2 + 4.500000x_3 - 4.500000x_4 - 1.500000x_{20} + 1.000000x_6 - 3.000000x_7 - 7.500000x_8$	
x_{17}	0.5	$-1.000000x_1 - 0.500000x_2 - 3.500000x_3 + 1.500000x_4 + 1.500000x_{20} - 5.000000x_6$	$+3.500000x_8$
x_{18}	18.5	$-0.500000x_2 - 1.500000x_3 + 0.500000x_4 - 0.500000x_{20} + 2.000000x_6$	$-1.500000x_8$
x_{19}	9.5	$+1.000000x_1 + 0.500000x_2 - 2.500000x_3 + 3.500000x_4 + 0.500000x_{20} + 1.000000x_6 + 3.000000x_7 + 4.500000x_8$	
x_5	3.5	$-0.500000x_2 + 1.500000x_3 - 1.500000x_4 - 0.500000x_{20} + 1.000000x_6$	$-1.500000x_8$
x_{21}	15.0	$-3.000000x_1 + 1.000000x_2 - 2.000000x_3 + 2.000000x_4$	$+2.000000x_6 + 2.000000x_7 + 1.000000x_8$
x_{22}	5.5	$+2.500000x_2 - 4.500000x_3 - 0.500000x_4 + 0.500000x_{20} + 2.000000x_6 - 2.000000x_7 + 2.500000x_8$	
x_{23}	14.5	$+3.000000x_1 + 2.500000x_2 - 0.500000x_3 - 2.500000x_4 - 0.500000x_{20} + 2.000000x_6$	$-3.500000x_8$
z	3.5	$-2.500000x_2 - 0.500000x_3 - 3.500000x_4 - 0.500000x_{20} + 1.000000x_6 - 1.000000x_7 + 0.500000x_8$	

x_6 enters and x_{17} leaves

x_9	12.9	$-2.800000x_1 + 1.100000x_2 + 3.700000x_3 - 1.300000x_4 - 0.300000x_{20} + 0.200000x_{17} + 2.000000x_7 - 1.700000x_8$	
x_{10}	12.5	$+1.000000x_1 + 0.500000x_2 + 1.500000x_3 + 1.500000x_4 - 0.500000x_{20}$	$+1.000000x_7 - 1.500000x_8$
x_{11}	2.7	$-1.400000x_1 + 3.300000x_2 - 0.900000x_3 + 1.100000x_4 - 0.900000x_{20} + 0.600000x_{17}$	$-2.100000x_8$
x_{12}	11.5	$-3.000000x_1 - 1.500000x_2 + 6.500000x_3 - 1.500000x_4 - 1.500000x_{20}$	$+1.000000x_7 - 1.500000x_8$
x_{13}	7.0	$+2.000000x_1 - 2.000000x_2 + 1.000000x_3 + 2.000000x_4$	$-2.000000x_7$
x_{14}	22.9	$+2.200000x_1 - 1.900000x_2 - 0.300000x_3 - 6.300000x_4 - 0.300000x_{20} - 0.800000x_{17} + 2.000000x_7 + 0.300000x_8$	
x_{15}	13.3	$-0.600000x_1 + 1.700000x_2 + 1.900000x_3 + 0.900000x_4 - 1.100000x_{20} + 0.400000x_{17} - 3.000000x_7 - 4.900000x_8$	
x_{16}	15.6	$-1.200000x_1 - 0.600000x_2 + 3.800000x_3 - 4.200000x_4 - 1.200000x_{20} - 0.200000x_{17} - 3.000000x_7 - 6.800000x_8$	
x_6	0.1	$-0.200000x_1 - 0.100000x_2 - 0.700000x_3 + 0.300000x_4 + 0.300000x_{20} - 0.200000x_{17}$	$+0.700000x_8$
x_{18}	18.7	$-0.400000x_1 - 0.700000x_2 - 2.900000x_3 + 1.100000x_4 + 0.100000x_{20} - 0.400000x_{17}$	$-0.100000x_8$
x_{19}	9.6	$+0.800000x_1 + 0.400000x_2 - 3.200000x_3 + 3.800000x_4 + 0.800000x_{20} - 0.200000x_{17} + 3.000000x_7 + 5.200000x_8$	
x_5	3.6	$-0.200000x_1 - 0.600000x_2 + 0.800000x_3 - 1.200000x_4 - 0.200000x_{20} - 0.200000x_{17}$	$-0.800000x_8$
x_{21}	15.2	$-3.400000x_1 + 0.800000x_2 - 3.400000x_3 + 2.600000x_4 + 0.600000x_{20} - 0.400000x_{17} + 2.000000x_7 + 2.400000x_8$	
x_{22}	5.7	$-0.400000x_1 + 2.300000x_2 - 5.900000x_3 + 0.100000x_4 + 1.100000x_{20} - 0.400000x_{17} - 2.000000x_7 + 3.900000x_8$	
x_{23}	14.7	$+2.600000x_1 + 2.300000x_2 - 1.900000x_3 - 1.900000x_4 + 0.100000x_{20} - 0.400000x_{17}$	$-2.100000x_8$
z	3.6	$-0.200000x_1 - 2.600000x_2 - 1.200000x_3 - 3.200000x_4 - 0.200000x_{20} - 0.200000x_{17} - 1.000000x_7 + 1.200000x_8$	

x_8 enters and x_{11} leaves

x_9	10.7142857143	$-1.666667x_1$	$-1.571429x_2$	$+4.428571x_3$	$-2.190476x_4$	$+0.428571x_{20}$	$-0.285714x_{17}$	$+2.000000x_7$	$+0.800000x_{11}$
x_{10}	10.5714285714	$+2.000000x_1$	$-1.857143x_2$	$+2.142857x_3$	$+0.714286x_4$	$+0.142857x_{20}$	$-0.428571x_{17}$	$+1.000000x_7$	$+0.700000x_{11}$
x_8	1.28571428571	$-0.666667x_1$	$+1.571429x_2$	$-0.428571x_3$	$+0.523810x_4$	$-0.428571x_{20}$	$+0.285714x_{17}$		$-0.400000x_{11}$
x_{12}	9.57142857143	$-2.000000x_1$	$-3.857143x_2$	$+7.142857x_3$	$-2.285714x_4$	$-0.857143x_{20}$	$-0.428571x_{17}$	$+1.000000x_7$	$+0.700000x_{11}$
x_{13}	7.0	$+2.000000x_1$	$-2.000000x_2$	$+1.000000x_3$	$+2.000000x_4$				$-2.000000x_7$
x_{14}	23.2857142857	$+2.000000x_1$	$-1.428571x_2$	$-0.428571x_3$	$-6.142857x_4$	$-0.428571x_{20}$	$-0.714286x_{17}$	$+2.000000x_7$	$-0.100000x_{11}$
x_{15}	7.0	$+2.666667x_1$	$-6.000000x_2$	$+4.000000x_3$	$-1.666667x_4$	$+1.000000x_{20}$	$-1.000000x_{17}$	$-3.000000x_7$	$+2.300000x_{11}$
x_{16}	6.85714285714	$+3.333333x_1$	$-11.285714x_2$	$+6.714286x_3$	$-7.761905x_4$	$+1.714286x_{20}$	$-2.142857x_{17}$	$-3.000000x_7$	$+3.200000x_{11}$
x_6	1.0	$-0.666667x_1$	$+1.000000x_2$	$-1.000000x_3$	$+0.666667x_4$		$+0.000000x_{17}$		$-0.300000x_{11}$
x_{18}	18.5714285714	$-0.333333x_1$	$-0.857143x_2$	$-2.857143x_3$	$+1.047619x_4$	$+0.142857x_{20}$	$-0.428571x_{17}$		$+0.000000x_{11}$
x_{19}	16.2857142857	$-2.666667x_1$	$+8.571429x_2$	$-5.428571x_3$	$+6.523810x_4$	$-1.428571x_{20}$	$+1.285714x_{17}$	$+3.000000x_7$	$-2.400000x_{11}$
x_5	2.57142857143	$+0.333333x_1$	$-1.857143x_2$	$+1.142857x_3$	$-1.619048x_4$	$+0.142857x_{20}$	$-0.428571x_{17}$		$+0.300000x_{11}$
x_{21}	18.2857142857	$-5.000000x_1$	$+4.571429x_2$	$-4.428571x_3$	$+3.857143x_4$	$-0.428571x_{20}$	$+0.285714x_{17}$	$+2.000000x_7$	$-1.100000x_{11}$
x_{22}	10.7142857143	$-3.000000x_1$	$+8.428571x_2$	$-7.571429x_3$	$+2.142857x_4$	$-0.571429x_{20}$	$+0.714286x_{17}$	$-2.000000x_7$	$-1.800000x_{11}$
x_{23}	12.0	$+4.000000x_1$	$-1.000000x_2$	$-1.000000x_3$	$-3.000000x_4$	$+1.000000x_{20}$	$-1.000000x_{17}$		$+1.000000x_{11}$
z	5.14285714286	$-1.000000x_1$	$-0.714286x_2$	$-1.714286x_3$	$-2.571429x_4$	$-0.714286x_{20}$	$+0.142857x_{17}$	$-1.000000x_7$	$-0.500000x_{11}$

x_{17} enters and x_{16} leaves

x_9	9.8	$-2.111111x_1$	$-0.066667x_2$	$+3.533333x_3$	$-1.155556x_4$	$+0.200000x_{20}$	$+0.133333x_{16}$	$+2.400000x_7$	$+0.377778x_{11}$
x_{10}	9.2	$+1.333333x_1$	$+0.400000x_2$	$+0.800000x_3$	$+2.266667x_4$	$-0.200000x_{20}$	$+0.200000x_{16}$	$+1.600000x_7$	$+0.066667x_{11}$
x_8	2.2	$-0.222222x_1$	$+0.066667x_2$	$+0.466667x_3$	$-0.511111x_4$	$-0.200000x_{20}$	$-0.133333x_{16}$	$-0.400000x_7$	$-0.044444x_{11}$
x_{12}	8.2	$-2.666667x_1$	$-1.600000x_2$	$+5.800000x_3$	$-0.733333x_4$	$-1.200000x_{20}$	$+0.200000x_{16}$	$+1.600000x_7$	$+0.066667x_{11}$
x_{13}	7.0	$+2.000000x_1$	$-2.000000x_2$	$+1.000000x_3$	$+2.000000x_4$				$-2.000000x_7$
x_{14}	21.0	$+0.888889x_1$	$+2.333333x_2$	$-2.666667x_3$	$-3.555556x_4$	$-1.000000x_{20}$	$+0.333333x_{16}$	$+3.000000x_7$	$-1.222222x_{11}$
x_{15}	3.8	$+1.111111x_1$	$-0.733333x_2$	$+0.866667x_3$	$+1.955556x_4$	$+0.200000x_{20}$	$+0.466667x_{16}$	$-1.600000x_7$	$+0.822222x_{11}$
x_{17}	3.2	$+1.555556x_1$	$-5.266667x_2$	$+3.133333x_3$	$-3.622222x_4$	$+0.800000x_{20}$	$-0.466667x_{16}$	$-1.400000x_7$	$+1.511111x_{11}$
x_6	1.0	$-0.666667x_1$	$+1.000000x_2$	$-1.000000x_3$	$+0.666667x_4$	$+0.000000x_{20}$	$-0.000000x_{16}$	$-0.000000x_7$	$-0.333333x_{11}$
x_{18}	17.2	$-1.000000x_1$	$+1.400000x_2$	$-4.200000x_3$	$+2.600000x_4$	$-0.200000x_{20}$	$+0.200000x_{16}$	$+0.600000x_7$	$-0.600000x_{11}$
x_{19}	20.4	$-0.666667x_1$	$+1.800000x_2$	$-1.400000x_3$	$+1.866667x_4$	$-0.400000x_{20}$	$-0.600000x_{16}$	$+1.200000x_7$	$-0.533333x_{11}$
x_5	1.2	$-0.333333x_1$	$+0.400000x_2$	$-0.200000x_3$	$-0.066667x_4$	$-0.200000x_{20}$	$+0.200000x_{16}$	$+0.600000x_7$	$-0.266667x_{11}$
x_{21}	19.2	$-4.555556x_1$	$+3.066667x_2$	$-3.533333x_3$	$+2.822222x_4$	$-0.200000x_{20}$	$-0.133333x_{16}$	$+1.600000x_7$	$-0.711111x_{11}$
x_{22}	13.0	$-1.888889x_1$	$+4.666667x_2$	$-5.333333x_3$	$-0.444444x_4$	$+0.000000x_{20}$	$-0.333333x_{16}$	$-3.000000x_7$	$-0.777778x_{11}$
x_{23}	8.8	$+2.444444x_1$	$+4.266667x_2$	$-4.133333x_3$	$+0.622222x_4$	$+0.200000x_{20}$	$+0.466667x_{16}$	$+1.400000x_7$	$-0.511111x_{11}$
z	5.6	$-0.777778x_1$	$-1.466667x_2$	$-1.266667x_3$	$-3.088889x_4$	$-0.600000x_{20}$	$-0.066667x_{16}$	$-1.200000x_7$	$-0.355556x_{11}$

x_{-1} enters and Final Dictionary Solution: 5.6 Num Pivots: 4