

$x_8$	5.0	$+1.000000x_1 + 3.000000x_2 + 3.000000x_3$	$+3.000000x_5 + 3.000000x_6 + 2.000000x_7$
$x_9$	12.0	$+3.000000x_1 + 1.000000x_2 - 1.000000x_3 - 3.000000x_4$	$+1.000000x_6 + 3.000000x_7$
$x_{10}$	9.0	$+2.000000x_1 - 1.000000x_2 + 3.000000x_3 - 1.000000x_4 + 1.000000x_5$	$+3.000000x_6 + 3.000000x_7$
$x_{11}$	4.0	$+1.000000x_1 - 1.000000x_2 + 1.000000x_3 + 2.000000x_4 - 1.000000x_5$	$-2.000000x_6 - 3.000000x_7$
$x_{12}$	7.0	$+2.000000x_1 - 1.000000x_2 - 2.000000x_3 + 3.000000x_4 + 3.000000x_5$	$+2.000000x_6 + 1.000000x_7$
$x_{13}$	9.0	$-3.000000x_1 + 1.000000x_2 - 2.000000x_3 + 3.000000x_4 + 3.000000x_5$	$-2.000000x_7$
$x_{14}$	12.0	$-2.000000x_1 - 3.000000x_2 + 1.000000x_3 - 3.000000x_4 + 2.000000x_5 + 1.000000x_6$	$-1.000000x_7$
$x_{15}$	10.0	$+3.000000x_1 - 3.000000x_2 - 1.000000x_3 + 1.000000x_4 - 1.000000x_5 + 1.000000x_6$	$+3.000000x_7$
$x_{16}$	1.0	$-3.000000x_1 - 1.000000x_2 - 2.000000x_3 - 3.000000x_4 + 3.000000x_5 - 3.000000x_6$	$+1.000000x_7$
$x_{17}$	1.0	$-2.000000x_1 + 3.000000x_2 + 1.000000x_3 - 1.000000x_4 - 3.000000x_5$	$+3.000000x_7$
$z$	0.0	$+1.000000x_1 - 1.000000x_2 + 2.000000x_3$	$+1.000000x_5 + 1.000000x_6 - 2.000000x_7$

No initialization required – Proceed to Optimize.

$x_8$	5.0	$+1.000000x_1 + 3.000000x_2 + 3.000000x_3$	$+3.000000x_5 + 3.000000x_6 + 2.000000x_7$
$x_9$	12.0	$+3.000000x_1 + 1.000000x_2 - 1.000000x_3 - 3.000000x_4$	$+1.000000x_6 + 3.000000x_7$
$x_{10}$	9.0	$+2.000000x_1 - 1.000000x_2 + 3.000000x_3 - 1.000000x_4 + 1.000000x_5$	$+3.000000x_6 + 3.000000x_7$
$x_{11}$	4.0	$+1.000000x_1 - 1.000000x_2 + 1.000000x_3 + 2.000000x_4 - 1.000000x_5$	$-2.000000x_6 - 3.000000x_7$
$x_{12}$	7.0	$+2.000000x_1 - 1.000000x_2 - 2.000000x_3 + 3.000000x_4 + 3.000000x_5$	$+2.000000x_6 + 1.000000x_7$
$x_{13}$	9.0	$-3.000000x_1 + 1.000000x_2 - 2.000000x_3 + 3.000000x_4 + 3.000000x_5$	$-2.000000x_7$
$x_{14}$	12.0	$-2.000000x_1 - 3.000000x_2 + 1.000000x_3 - 3.000000x_4 + 2.000000x_5 + 1.000000x_6$	$-1.000000x_7$
$x_{15}$	10.0	$+3.000000x_1 - 3.000000x_2 - 1.000000x_3 + 1.000000x_4 - 1.000000x_5 + 1.000000x_6$	$+3.000000x_7$
$x_{16}$	1.0	$-3.000000x_1 - 1.000000x_2 - 2.000000x_3 - 3.000000x_4 + 3.000000x_5 - 3.000000x_6$	$+1.000000x_7$
$x_{17}$	1.0	$-2.000000x_1 + 3.000000x_2 + 1.000000x_3 - 1.000000x_4 - 3.000000x_5$	$+3.000000x_7$
$z$	0.0	$+1.000000x_1 - 1.000000x_2 + 2.000000x_3$	$+1.000000x_5 + 1.000000x_6 - 2.000000x_7$

$x_1$  enters and  $x_{16}$  leaves

$x_8$	5.3333333333	$-0.333333x_{16} + 2.666667x_2 + 2.333333x_3 - 1.000000x_4 + 4.000000x_5 + 2.000000x_6 + 2.333333x_7$
$x_9$	13.0	$-1.000000x_{16} - 3.000000x_3 - 6.000000x_4 + 3.000000x_5 - 2.000000x_6 + 4.000000x_7$
$x_{10}$	9.6666666667	$-0.666667x_{16} - 1.666667x_2 + 1.666667x_3 - 3.000000x_4 + 3.000000x_5 + 1.000000x_6 + 3.666667x_7$
$x_{11}$	4.3333333333	$-0.333333x_{16} - 1.333333x_2 + 0.333333x_3 + 1.000000x_4 - 3.000000x_6 - 2.666667x_7$
$x_{12}$	7.6666666667	$-0.666667x_{16} - 1.666667x_2 - 3.333333x_3 + 1.000000x_4 + 5.000000x_5 + 1.666667x_7$
$x_{13}$	8.0	$+1.000000x_{16} + 2.000000x_2 + 6.000000x_4 + 3.000000x_6 - 3.000000x_7$
$x_{14}$	11.3333333333	$+0.666667x_{16} - 2.333333x_2 + 2.333333x_3 - 1.000000x_4 + 3.000000x_6 - 1.666667x_7$
$x_{15}$	11.0	$-1.000000x_{16} - 4.000000x_2 - 3.000000x_3 - 2.000000x_4 + 2.000000x_5 - 2.000000x_6 + 4.000000x_7$
$x_1$	0.3333333333	$-0.333333x_{16} - 0.333333x_2 - 0.666667x_3 - 1.000000x_4 + 1.000000x_5 - 1.000000x_6 + 0.333333x_7$
$x_{17}$	0.3333333333	$+0.666667x_{16} + 3.666667x_2 + 2.333333x_3 + 1.000000x_4 - 5.000000x_5 + 2.000000x_6 + 2.333333x_7$
$z$	0.3333333333	$-0.333333x_{16} - 1.333333x_2 + 1.333333x_3 - 1.000000x_4 + 2.000000x_5 - 1.666667x_7$

$x_3$  enters and  $x_1$  leaves

$x_8$	6.5	$-1.500000x_{16} + 1.500000x_2 - 3.500000x_1 - 4.500000x_4 + 7.500000x_5 - 1.500000x_6 + 3.500000x_7$
$x_9$	11.5	$+0.500000x_{16} + 1.500000x_2 + 4.500000x_1 - 1.500000x_4 - 1.500000x_5 + 2.500000x_6 + 2.500000x_7$
$x_{10}$	10.5	$-1.500000x_{16} - 2.500000x_2 - 2.500000x_1 - 5.500000x_4 + 5.500000x_5 - 1.500000x_6 + 4.500000x_7$
$x_{11}$	4.5	$-0.500000x_{16} - 1.500000x_2 - 0.500000x_1 + 0.500000x_4 + 0.500000x_5 - 3.500000x_6 - 2.500000x_7$
$x_{12}$	6.0	$+1.000000x_{16} + 5.000000x_1 + 6.000000x_4 + 5.000000x_6$
$x_{13}$	8.0	$+1.000000x_{16} + 2.000000x_2 + 6.000000x_4 + 3.000000x_6 - 3.000000x_7$
$x_{14}$	12.5	$-0.500000x_{16} - 3.500000x_2 - 3.500000x_1 - 4.500000x_4 + 3.500000x_5 - 0.500000x_6 - 0.500000x_7$
$x_{15}$	9.5	$+0.500000x_{16} - 2.500000x_2 + 4.500000x_1 + 2.500000x_4 - 2.500000x_5 + 2.500000x_6 + 2.500000x_7$
$x_3$	0.5	$-0.500000x_{16} - 0.500000x_2 - 1.500000x_1 - 1.500000x_4 + 1.500000x_5 - 1.500000x_6 + 0.500000x_7$
$x_{17}$	1.5	$-0.500000x_{16} + 2.500000x_2 - 3.500000x_1 - 2.500000x_4 - 1.500000x_5 - 1.500000x_6 + 3.500000x_7$
$z$	1.0	$-1.000000x_{16} - 2.000000x_2 - 2.000000x_1 - 3.000000x_4 + 4.000000x_5 - 2.000000x_6 - 1.000000x_7$

$x_5$  enters and  $x_{17}$  leaves

$x_8$	14.0	$-4.000000x_{16} + 14.000000x_2 - 21.000000x_1 - 17.000000x_4 - 5.000000x_{17} - 9.000000x_6 + 21.000000x_7$
$x_9$	10.0	$+1.000000x_{16} - 1.000000x_2 + 8.000000x_1 + 1.000000x_4 + 1.000000x_{17} + 4.000000x_6 - 1.000000x_7$
$x_{10}$	16.0	$-3.333333x_{16} + 6.666667x_2 - 15.333333x_1 - 14.666667x_4 - 3.666667x_{17} - 7.000000x_6 + 17.333333x_7$
$x_{11}$	5.0	$-0.666667x_{16} - 0.666667x_2 - 1.666667x_1 - 0.333333x_4 - 0.333333x_{17} - 4.000000x_6 - 1.333333x_7$
$x_{12}$	6.0	$+1.000000x_{16} + 5.000000x_1 + 6.000000x_4 + 5.000000x_6$
$x_{13}$	8.0	$+1.000000x_{16} + 2.000000x_2 + 6.000000x_4 + 3.000000x_6 - 3.000000x_7$
$x_{14}$	16.0	$-1.666667x_{16} + 2.333333x_2 - 11.666667x_1 - 10.333333x_4 - 2.333333x_{17} - 4.000000x_6 + 7.666667x_7$
$x_{15}$	7.0	$+1.333333x_{16} - 6.666667x_2 + 10.333333x_1 + 6.666667x_4 + 1.666667x_{17} + 5.000000x_6 - 3.333333x_7$
$x_3$	2.0	$-1.000000x_{16} + 2.000000x_2 - 5.000000x_1 - 4.000000x_4 - 1.000000x_{17} - 3.000000x_6 + 4.000000x_7$
$x_5$	1.0	$-0.333333x_{16} + 1.666667x_2 - 2.333333x_1 - 1.666667x_4 - 0.666667x_{17} - 1.000000x_6 + 2.333333x_7$
$z$	5.0	$-2.333333x_{16} + 4.666667x_2 - 11.333333x_1 - 9.666667x_4 - 2.666667x_{17} - 6.000000x_6 + 8.333333x_7$

$x_2$  enters and  $x_{15}$  leaves

$x_8$	28.7	$-1.200000x_{16} - 2.100000x_{15} + 0.700000x_1 - 3.000000x_4 - 1.500000x_{17} + 1.500000x_6 + 14.000000x_7$
$x_9$	8.95	$+0.800000x_{16} + 0.150000x_{15} + 6.450000x_1 - 0.000000x_4 + 0.750000x_{17} + 3.250000x_6 - 0.500000x_7$
$x_{10}$	23.0	$-2.000000x_{16} - 1.000000x_{15} - 5.000000x_1 - 8.000000x_4 - 2.000000x_{17} - 2.000000x_6 + 14.000000x_7$
$x_{11}$	4.3	$-0.800000x_{16} + 0.100000x_{15} - 2.700000x_1 - 1.000000x_4 - 0.500000x_{17} - 4.500000x_6 - 1.000000x_7$
$x_{12}$	6.0	$+1.000000x_{16} + 5.000000x_1 + 6.000000x_4 + 5.000000x_6$
$x_{13}$	10.1	$+1.400000x_{16} - 0.300000x_{15} + 3.100000x_1 + 8.000000x_4 + 0.500000x_{17} + 4.500000x_6 - 4.000000x_7$
$x_{14}$	18.45	$-1.200000x_{16} - 0.350000x_{15} - 8.050000x_1 - 8.000000x_4 - 1.750000x_{17} - 2.250000x_6 + 6.500000x_7$
$x_2$	1.05	$+0.200000x_{16} - 0.150000x_{15} + 1.550000x_1 + 1.000000x_4 + 0.250000x_{17} + 0.750000x_6 - 0.500000x_7$
$x_3$	4.1	$-0.600000x_{16} - 0.300000x_{15} - 1.900000x_1 - 2.000000x_4 - 0.500000x_{17} - 1.500000x_6 + 3.000000x_7$
$x_5$	2.75	$-0.250000x_{15} + 0.250000x_1 - 0.250000x_{17} + 0.250000x_6 + 1.500000x_7$
$z$	9.9	$-1.400000x_{16} - 0.700000x_{15} - 4.100000x_1 - 5.000000x_4 - 1.500000x_{17} - 2.500000x_6 + 6.000000x_7$

$x_7$  enters and  $x_2$  leaves

$x_8$	58.1	$+4.400000x_{16} - 6.300000x_{15} + 44.100000x_1 + 25.000000x_4 + 5.500000x_{17} + 22.500000x_6 - 28.000000x_2$
$x_9$	7.9	$+0.600000x_{16} + 0.300000x_{15} + 4.900000x_1 - 1.000000x_4 + 0.500000x_{17} + 2.500000x_6 + 1.000000x_2$
$x_{10}$	52.4	$+3.600000x_{16} - 5.200000x_{15} + 38.400000x_1 + 20.000000x_4 + 5.000000x_{17} + 19.000000x_6 - 28.000000x_2$
$x_{11}$	2.2	$-1.200000x_{16} + 0.400000x_{15} - 5.800000x_1 - 3.000000x_4 - 1.000000x_{17} - 6.000000x_6 + 2.000000x_2$
$x_{12}$	6.0	$+1.000000x_{16} + 5.000000x_1 + 6.000000x_4 + 5.000000x_6$
$x_{13}$	1.7	$-0.200000x_{16} + 0.900000x_{15} - 9.300000x_1 - 0.000000x_4 - 1.500000x_{17} - 1.500000x_6 + 8.000000x_2$
$x_{14}$	32.1	$+1.400000x_{16} - 2.300000x_{15} + 12.100000x_1 + 5.000000x_4 + 1.500000x_{17} + 7.500000x_6 - 13.000000x_2$
$x_7$	2.1	$+0.400000x_{16} - 0.300000x_{15} + 3.100000x_1 + 2.000000x_4 + 0.500000x_{17} + 1.500000x_6 - 2.000000x_2$
$x_3$	10.4	$+0.600000x_{16} - 1.200000x_{15} + 7.400000x_1 + 4.000000x_4 + 1.000000x_{17} + 3.000000x_6 - 6.000000x_2$
$x_5$	5.9	$+0.600000x_{16} - 0.700000x_{15} + 4.900000x_1 + 3.000000x_4 + 0.500000x_{17} + 2.500000x_6 - 3.000000x_2$
$z$	22.5	$+1.000000x_{16} - 2.500000x_{15} + 14.500000x_1 + 7.000000x_4 + 1.500000x_{17} + 6.500000x_6 - 12.000000x_2$

$x_1$  enters and  $x_{13}$  leaves

$x_8$	66.1612903226	$+3.451613x_{16} - 2.032258x_{15} - 4.741935x_{13} + 25.000000x_4 - 1.612903x_{17} + 15.387097x_6 + 9.935484x_2$
$x_9$	8.79569892473	$+0.494624x_{16} + 0.774194x_{15} - 0.526882x_{13} - 1.000000x_4 - 0.290323x_{17} + 1.709677x_6 + 5.215054x_2$
$x_{10}$	59.4193548387	$+2.774194x_{16} - 1.483871x_{15} - 4.129032x_{13} + 20.000000x_4 - 1.193548x_{17} + 12.806452x_6 + 5.032258x_2$
$x_{11}$	1.13978494624	$-1.075269x_{16} - 0.161290x_{15} + 0.623656x_{13} - 3.000000x_4 - 0.064516x_{17} - 5.064516x_6 - 2.989247x_2$
$x_{12}$	6.91397849462	$+0.892473x_{16} + 0.483871x_{15} - 0.537634x_{13} + 6.000000x_4 - 0.806452x_{17} + 4.193548x_6 + 4.301075x_2$
$x_1$	0.182795698925	$-0.021505x_{16} + 0.096774x_{15} - 0.107527x_{13} - 0.000000x_4 - 0.161290x_{17} - 0.161290x_6 + 0.860215x_2$
$x_{14}$	34.311827957	$+1.139785x_{16} - 1.129032x_{15} - 1.301075x_{13} + 5.000000x_4 - 0.451613x_{17} + 5.548387x_6 - 2.591398x_2$
$x_7$	2.66666666667	$+0.333333x_{16} - 0.333333x_{13} + 2.000000x_4 + 0.000000x_{17} + 1.000000x_6 + 0.666667x_2$
$x_3$	11.752688172	$+0.440860x_{16} - 0.483871x_{15} - 0.795699x_{13} + 4.000000x_4 - 0.193548x_{17} + 1.806452x_6 + 0.365591x_2$
$x_5$	6.79569892473	$+0.494624x_{16} - 0.225806x_{15} - 0.526882x_{13} + 3.000000x_4 - 0.290323x_{17} + 1.709677x_6 + 1.215054x_2$
$z$	25.1505376344	$+0.688172x_{16} - 1.096774x_{15} - 1.559140x_{13} + 7.000000x_4 - 0.838710x_{17} + 4.161290x_6 + 0.473118x_2$

$x_2$  enters and  $x_{11}$  leaves

$x_8$	69.9496402878	$-0.122302x_{16} - 2.568345x_{15} - 2.669065x_{13} + 15.028777x_4 - 1.827338x_{17} - 1.446043x_6 - 3.323741x_{11}$
$x_9$	10.7841726619	$-1.381295x_{16} + 0.492806x_{15} + 0.561151x_{13} - 6.233813x_4 - 0.402878x_{17} - 7.125899x_6 - 1.744604x_{11}$
$x_{10}$	61.3381294964	$+0.964029x_{16} - 1.755396x_{15} - 3.079137x_{13} + 14.949640x_4 - 1.302158x_{17} + 4.280576x_6 - 1.683453x_{11}$
$x_2$	0.381294964029	$-0.359712x_{16} - 0.053957x_{15} + 0.208633x_{13} - 1.003597x_4 - 0.021583x_{17} - 1.694245x_6 - 0.334532x_{11}$
$x_{12}$	8.55395683453	$-0.654676x_{16} + 0.251799x_{15} + 0.359712x_{13} + 1.683453x_4 - 0.899281x_{17} - 3.093525x_6 - 1.438849x_{11}$
$x_1$	0.510791366906	$-0.330935x_{16} + 0.050360x_{15} + 0.071942x_{13} - 0.863309x_4 - 0.179856x_{17} - 1.618705x_6 - 0.287770x_{11}$
$x_{14}$	33.3237410072	$+2.071942x_{16} - 0.989209x_{15} - 1.841727x_{13} + 7.600719x_4 - 0.395683x_{17} + 9.938849x_6 + 0.866906x_{11}$
$x_7$	2.92086330935	$+0.093525x_{16} - 0.035971x_{15} - 0.194245x_{13} + 1.330935x_4 - 0.014388x_{17} - 0.129496x_6 - 0.223022x_{11}$
$x_3$	11.8920863309	$+0.309353x_{16} - 0.503597x_{15} - 0.719424x_{13} + 3.633094x_4 - 0.201439x_{17} + 1.187050x_6 - 0.122302x_{11}$
$x_5$	7.25899280576	$+0.057554x_{16} - 0.291367x_{15} - 0.273381x_{13} + 1.780576x_4 - 0.316547x_{17} - 0.348921x_6 - 0.406475x_{11}$
$z$	25.3309352518	$+0.517986x_{16} - 1.122302x_{15} - 1.460432x_{13} + 6.525180x_4 - 0.848921x_{17} + 3.359712x_6 - 0.158273x_{11}$

$x_4$  enters and  $x_2$  leaves

$x_8$	75.6594982079	$-5.508961x_{16}$	$-3.376344x_{15}$	$+0.455197x_{13}$	$-14.974910x_2$	$-2.150538x_{17}$	$-26.817204x_6$	$-8.333333x_{11}$
$x_9$	8.41577060932	$+0.853047x_{16}$	$+0.827957x_{15}$	$-0.734767x_{13}$	$+6.211470x_2$	$-0.268817x_{17}$	$+3.397849x_6$	$+0.333333x_{11}$
$x_{10}$	67.017921147	$-4.394265x_{16}$	$-2.559140x_{15}$	$+0.028674x_{13}$	$-14.896057x_2$	$-1.623656x_{17}$	$-20.956989x_6$	$-6.666667x_{11}$
$x_4$	0.379928315412	$-0.358423x_{16}$	$-0.053763x_{15}$	$+0.207885x_{13}$	$-0.996416x_2$	$-0.021505x_{17}$	$-1.688172x_6$	$-0.333333x_{11}$
$x_{12}$	9.1935483871	$-1.258065x_{16}$	$+0.161290x_{15}$	$+0.709677x_{13}$	$-1.677419x_2$	$-0.935484x_{17}$	$-5.935484x_6$	$-2.000000x_{11}$
$x_1$	0.182795698925	$-0.021505x_{16}$	$+0.096774x_{15}$	$-0.107527x_{13}$	$+0.860215x_2$	$-0.161290x_{17}$	$-0.161290x_6$	$+0.000000x_{11}$
$x_{14}$	36.2114695341	$-0.652330x_{16}$	$-1.397849x_{15}$	$-0.261649x_{13}$	$-7.573477x_2$	$-0.559140x_{17}$	$-2.892473x_6$	$-1.666667x_{11}$
$x_7$	3.42652329749	$-0.383513x_{16}$	$-0.107527x_{15}$	$+0.082437x_{13}$	$-1.326165x_2$	$-0.043011x_{17}$	$-2.376344x_6$	$-0.666667x_{11}$
$x_3$	13.2724014337	$-0.992832x_{16}$	$-0.698925x_{15}$	$+0.035842x_{13}$	$-3.620072x_2$	$-0.279570x_{17}$	$-4.946237x_6$	$-1.333333x_{11}$
$x_5$	7.93548387097	$-0.580645x_{16}$	$-0.387097x_{15}$	$+0.096774x_{13}$	$-1.774194x_2$	$-0.354839x_{17}$	$-3.354839x_6$	$-1.000000x_{11}$
$z$	27.8100358423	$-1.820789x_{16}$	$-1.473118x_{15}$	$-0.103943x_{13}$	$-6.501792x_2$	$-0.989247x_{17}$	$-7.655914x_6$	$-2.333333x_{11}$

$x_{-1}$  enters and Final Dictionary Solution: 27.8100358423 Num Pivots: 8