

Student Number: 1
Student ID: 16171659

Minimise: $z = -1x_1 + 4x_2 - 2x_3 - 5x_4 - 4x_5 - 2x_6 + 5x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 - 4x_2 + 2x_3 + 2x_4 - 3x_5 + 1x_6 - 4x_7 + 4x_8 + 1x_9 &= -5.71703825 \\ +2x_1 + 3x_3 + 2x_4 + 1x_5 - 1x_6 + 1x_8 + 1x_{10} &= 117.49007285 \\ -1x_1 + 4x_4 - 1x_5 + 3x_6 - 1x_7 + 1x_8 + 1x_{11} &= 78.47199761 \\ -4x_1 + 1x_2 + 5x_3 - 2x_4 + 5x_5 + 1x_6 - 1x_7 - 1x_8 + 1x_{12} &= 27.05784774 \\ -2x_1 + 1x_2 + 1x_3 - 2x_4 - 3x_5 + 4x_6 - 5x_7 + 2x_8 + 1x_{13} &= -61.27608490 \\ +3x_1 - 2x_2 + 4x_3 - 2x_4 - 4x_5 + 3x_6 - 5x_7 + 1x_8 + 1x_{14} &= -44.14281050 \\ +3x_1 + 4x_2 - 3x_3 + 4x_4 - 5x_5 + 3x_6 + 1x_7 - 4x_8 + 1x_{15} &= 59.07935665 \\ +4x_1 + 3x_2 - 1x_3 + 3x_4 + 3x_5 - 3x_6 - 3x_7 - 3x_8 + 1x_{16} &= 12.53792958 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 2
Student ID: 10158146

Minimise: $z = -4x_1 - 5x_2 + 5x_3 + 3x_4 - 5x_5 - 6x_6 - 4x_7 - 3x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 + 4x_2 + 4x_3 + 2x_4 - 1x_5 + 3x_6 + 5x_7 - 3x_8 + 1x_9 &= 84.63076090 \\ +4x_1 - 5x_2 + 2x_3 - 3x_4 - 4x_5 + 3x_6 + 5x_7 + 4x_8 + 1x_{10} &= 56.08226166 \\ -4x_1 + 5x_2 + 4x_3 - 2x_4 + 4x_6 - 4x_7 + 5x_8 + 1x_{11} &= 88.58709131 \\ -4x_1 - 1x_2 + 4x_3 + 4x_4 + 4x_5 + 4x_6 + 4x_7 + 5x_8 + 1x_{12} &= 194.01268815 \\ -2x_3 + 4x_4 + 4x_5 - 2x_6 - 3x_7 - 5x_8 + 1x_{13} &= -17.42883861 \\ +2x_1 + 2x_2 - 2x_3 + 1x_4 - 1x_5 - 1x_6 - 3x_7 + 3x_8 + 1x_{14} &= 4.60556779 \\ -1x_1 + 4x_2 - 3x_3 + 1x_5 + 2x_6 - 3x_7 + 3x_8 + 1x_{15} &= -5.99537051 \\ +3x_1 - 3x_2 + 1x_3 - 4x_4 + 5x_6 + 2x_7 - 1x_8 + 1x_{16} &= 30.87509853 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 3
Student ID: 15169448

Minimise: $z = -7x_1 - 1x_3 - 5x_5 + 3x_6 + 6x_7 - 6x_8$

Constraint Equations:

$$\begin{aligned} -5x_1 - 3x_2 - 5x_3 - 5x_5 - 5x_6 - 3x_7 - 5x_8 + 1x_9 &= -264.51166340 \\ -3x_1 + 4x_2 + 4x_3 + 1x_4 + 1x_5 + 1x_6 + 4x_7 - 1x_8 + 1x_{10} &= 48.04089515 \\ -2x_1 + 2x_2 - 1x_3 + 1x_4 + 4x_5 + 1x_6 + 4x_7 + 4x_8 + 1x_{11} &= 95.68061178 \\ +1x_1 + 4x_2 + 4x_3 - 4x_4 - 2x_5 + 1x_6 - 3x_7 - 5x_8 + 1x_{12} &= -28.12165749 \\ -1x_1 - 2x_2 + 4x_3 - 2x_5 - 3x_6 - 3x_7 + 1x_8 + 1x_{13} &= -37.66881718 \\ +4x_1 - 2x_2 + 4x_3 + 2x_5 + 1x_6 + 1x_7 - 4x_8 + 1x_{14} &= 85.71130094 \\ -4x_1 + 4x_2 - 4x_3 - 1x_4 + 2x_5 - 4x_6 - 2x_7 - 1x_8 + 1x_{15} &= -83.91396416 \\ +5x_2 - 3x_3 + 4x_4 + 3x_5 - 5x_6 - 4x_7 - 2x_8 + 1x_{16} &= -36.72004015 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 4
Student ID: 8114404

Minimise: $z = -7x_1 - 4x_2 - 1x_3 - 5x_4 + 1x_5 - 7x_6 - 5x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} -1x_1 + 2x_2 - 4x_3 + 2x_4 + 2x_5 - 3x_6 - 4x_7 - 1x_8 + 1x_9 &= -72.62542767 \\ +5x_1 + 2x_2 + 1x_3 - 1x_4 + 2x_5 + 1x_6 + 1x_8 + 1x_{10} &= 161.04426312 \\ +2x_1 - 2x_2 - 3x_3 + 4x_4 - 5x_5 - 2x_6 - 5x_7 + 3x_8 + 1x_{11} &= -84.65489180 \\ +3x_2 - 2x_3 + 4x_4 - 2x_5 + 2x_6 + 2x_7 + 4x_8 + 1x_{12} &= 131.61946065 \\ -2x_1 - 3x_2 - 2x_3 + 1x_4 + 4x_5 + 2x_6 - 4x_7 + 1x_{13} &= -66.00271648 \\ -3x_1 + 4x_2 - 5x_3 + 3x_4 - 1x_5 - 2x_6 - 4x_7 - 5x_8 + 1x_{14} &= -117.24131282 \\ +2x_1 - 4x_2 - 1x_3 + 2x_4 - 2x_5 - 4x_6 + 1x_7 + 1x_{15} &= -93.93606046 \\ +4x_1 + 2x_2 - 1x_4 - 1x_5 + 5x_6 - 4x_7 + 2x_8 + 1x_{16} &= 136.28367222 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 5
Student ID: 16151739

Minimise: $z = -5x_1 - 1x_2 + 1x_4 - 1x_5 - 1x_6 - 3x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 + 4x_2 - 4x_3 + 2x_4 + 4x_5 - 4x_6 - 3x_7 - 2x_8 + 1x_9 &= -12.43052302 \\ -4x_1 - 2x_2 - 3x_3 - 2x_4 + 4x_5 - 3x_6 - 4x_7 + 4x_8 + 1x_{10} &= -66.53146566 \\ -1x_2 + 4x_3 - 1x_4 - 1x_5 + 4x_6 - 4x_7 + 3x_8 + 1x_{11} &= -0.82633005 \\ -4x_1 + 5x_2 - 1x_3 + 2x_5 + 1x_6 - 1x_7 - 1x_8 + 1x_{12} &= 51.20270660 \\ +5x_1 - 3x_2 - 1x_3 + 3x_4 + 5x_5 - 3x_6 + 5x_7 - 1x_8 + 1x_{13} &= 111.50567462 \\ +3x_2 - 4x_3 + 3x_4 - 2x_5 - 1x_6 - 4x_7 - 1x_8 + 1x_{14} &= -54.20757646 \\ +4x_1 + 4x_2 + 1x_3 + 3x_4 - 3x_5 + 1x_6 - 1x_7 - 1x_8 + 1x_{15} &= 34.59539500 \\ +3x_1 - 4x_2 + 2x_3 + 3x_4 + 4x_5 + 5x_6 + 4x_7 - 3x_8 + 1x_{16} &= 168.63178817 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 6
Student ID: 17192323

Minimise: $z = +1x_1 + 1x_2 - 2x_3 - 6x_5 - 2x_6 - 1x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} +2x_1 + 3x_2 - 5x_3 - 4x_4 - 3x_5 + 5x_7 + 1x_9 &= 17.93882672 \\ -1x_1 - 2x_2 - 3x_3 + 1x_4 - 1x_5 + 4x_6 + 1x_7 - 3x_8 + 1x_{10} &= -51.09774712 \\ -5x_1 + 5x_2 - 1x_3 + 2x_4 + 4x_5 - 4x_6 + 1x_7 - 1x_8 + 1x_{11} &= 79.63340395 \\ -3x_1 - 1x_2 - 2x_3 + 4x_4 - 1x_5 - 2x_6 + 3x_7 + 5x_8 + 1x_{12} &= 50.90047365 \\ -5x_2 + 4x_3 - 5x_4 - 1x_5 - 3x_6 - 1x_7 + 3x_8 + 1x_{13} &= -21.58380346 \\ +4x_1 + 3x_2 - 1x_3 - 5x_4 + 1x_6 + 5x_7 - 2x_8 + 1x_{14} &= 70.32019692 \\ +4x_1 + 5x_2 + 2x_3 - 1x_4 + 2x_5 - 1x_6 + 1x_{15} &= 78.37074377 \\ -4x_2 - 3x_3 + 4x_4 - 4x_5 - 5x_6 + 2x_7 + 3x_8 + 1x_{16} &= -47.04733667 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 7
Student ID: 16171101

Minimise: $z = -2x_1 + 3x_2 + 2x_3 - 2x_4 - 3x_5 - 5x_6 + 2x_7$

Constraint Equations:

$$\begin{aligned} -1x_2 + 2x_3 + 4x_4 + 1x_5 - 4x_6 - 4x_8 + 1x_9 &= 7.79293755 \\ -1x_2 - 3x_3 + 3x_4 + 5x_5 + 3x_6 + 3x_7 - 3x_8 + 1x_{10} &= 73.68430892 \\ +2x_1 - 5x_3 + 4x_4 - 3x_6 - 2x_8 + 1x_{11} &= 14.92719591 \\ -2x_1 + 5x_3 - 1x_4 + 3x_5 + 4x_6 + 2x_7 + 1x_8 + 1x_{12} &= 60.16078296 \\ -1x_1 - 4x_2 - 4x_3 + 4x_4 - 4x_6 - 3x_7 - 2x_8 + 1x_{13} &= -97.19179187 \\ -5x_1 + 2x_2 - 2x_3 - 1x_4 + 5x_6 + 2x_8 + 1x_{14} &= -65.42306971 \\ +1x_1 - 1x_4 + 3x_6 - 3x_7 + 4x_8 + 1x_{15} &= -0.39112394 \\ -1x_1 + 4x_2 - 4x_3 + 4x_4 + 1x_5 - 2x_6 + 4x_7 - 4x_8 + 1x_{16} &= 41.10225880 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 8
Student ID: 16147294

Minimise: $z = +1x_1 + 5x_2 + 3x_3 - 4x_4 - 3x_5 - 6x_6 + 2x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} +2x_1 + 4x_3 - 5x_4 + 2x_5 - 3x_6 + 2x_7 - 1x_8 + 1x_9 &= -19.63782823 \\ +1x_1 + 5x_2 - 4x_3 - 1x_4 + 3x_5 + 1x_7 - 4x_8 + 1x_{10} &= 76.41545634 \\ -1x_1 - 2x_2 + 2x_3 - 3x_4 + 2x_5 + 2x_6 + 3x_7 + 5x_8 + 1x_{11} &= 134.93405987 \\ -4x_1 + 1x_2 + 4x_3 - 3x_4 + 1x_5 + 2x_6 - 2x_8 + 1x_{12} &= 10.92286944 \\ +1x_1 - 3x_2 + 3x_4 + 3x_5 - 4x_6 + 2x_8 + 1x_{13} &= -18.26282959 \\ -1x_1 + 4x_2 - 4x_3 + 4x_4 + 1x_5 + 3x_6 + 1x_7 - 1x_8 + 1x_{14} &= 133.00461099 \\ -4x_1 - 4x_2 + 2x_3 - 3x_4 + 4x_5 - 3x_6 + 1x_7 + 4x_8 + 1x_{15} &= 3.25879717 \\ -2x_1 + 3x_2 + 4x_3 - 1x_4 + 3x_5 - 2x_6 - 5x_8 + 1x_{16} &= -24.05471497 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 9
Student ID: 16186885

Minimise: $z = -6x_1 + 5x_2 - 4x_3 + 5x_4 + 1x_5 + 1x_6 - 2x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 + 3x_2 + 2x_3 + 2x_4 + 1x_6 + 3x_7 - 4x_8 + 1x_9 &= 73.71832939 \\ +2x_1 + 4x_2 - 1x_3 + 3x_4 + 3x_5 + 5x_6 - 4x_7 + 3x_8 + 1x_{10} &= 111.75175036 \\ +4x_1 + 2x_2 - 3x_3 + 3x_4 - 2x_5 - 1x_6 - 2x_7 - 2x_8 + 1x_{11} &= -62.91827144 \\ -4x_1 + 3x_2 - 4x_3 - 2x_4 - 5x_5 + 3x_7 + 1x_8 + 1x_{12} &= 65.68189083 \\ -3x_1 + 1x_3 + 5x_4 - 5x_5 - 2x_6 + 4x_7 - 1x_8 + 1x_{13} &= 28.90824691 \\ +4x_1 - 5x_2 + 1x_3 + 2x_4 + 2x_5 + 3x_6 + 3x_7 + 1x_8 + 1x_{14} &= 59.95958075 \\ +3x_1 + 1x_2 + 4x_3 + 2x_4 - 4x_5 - 1x_6 + 1x_7 - 2x_8 + 1x_{15} &= 18.93158370 \\ -3x_1 + 3x_2 - 3x_3 - 5x_4 - 2x_5 + 5x_6 + 5x_7 - 1x_8 + 1x_{16} &= 164.02280026 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 10
Student ID: 16177703

Minimise: $z = -3x_1 - 2x_2 - 1x_3 - 4x_5 - 4x_6 + 4x_7 + 1x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 + 4x_2 + 4x_3 + 5x_4 - 1x_5 + 4x_7 + 4x_8 + 1x_9 &= 172.04139651 \\ -2x_1 + 3x_2 + 1x_3 + 3x_4 + 4x_5 + 4x_6 + 3x_8 + 1x_{10} &= 201.31629902 \\ -2x_1 - 2x_2 + 2x_3 + 3x_4 - 4x_5 + 4x_7 + 1x_8 + 1x_{11} &= 30.98956898 \\ +4x_1 + 4x_2 + 1x_4 + 2x_5 + 4x_6 + 5x_7 + 2x_8 + 1x_{12} &= 246.02449504 \\ +3x_1 + 3x_2 - 4x_3 - 4x_4 - 4x_5 - 2x_6 - 2x_7 + 1x_{13} &= -152.24897254 \\ -2x_2 + 2x_3 + 3x_4 + 1x_5 + 2x_6 + 2x_7 - 5x_8 + 1x_{14} &= 64.31924510 \\ -1x_1 - 3x_2 - 5x_4 + 3x_5 + 5x_6 + 1x_7 - 2x_8 + 1x_{15} &= 68.88484131 \\ -4x_1 + 5x_2 - 3x_3 + 1x_4 - 5x_5 - 2x_6 - 2x_7 + 4x_8 + 1x_{16} &= -85.53873499 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 11
Student ID: 15182932

Minimise: $z = -1x_1 + 3x_2 - 4x_4 - 5x_5 - 1x_6 + 4x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} &+2x_2 - 3x_3 - 2x_4 + 5x_5 + 3x_7 + 3x_8 + 1x_9 = 51.59429910 \\ -4x_1 + 5x_2 + 2x_3 - 1x_4 + 2x_5 - 1x_6 - 4x_7 - 1x_8 + 1x_{10} &= -11.15908204 \\ +1x_1 - 1x_2 + 3x_3 + 3x_4 - 1x_5 + 3x_6 + 4x_7 + 2x_8 + 1x_{11} &= 151.26809726 \\ +4x_1 - 3x_2 - 5x_3 + 2x_4 - 3x_5 - 1x_6 + 3x_7 + 5x_8 + 1x_{12} &= -20.32644190 \\ +4x_1 + 1x_2 - 5x_3 + 1x_4 + 2x_5 - 4x_6 + 4x_7 - 3x_8 + 1x_{13} &= -114.58890969 \\ -4x_1 + 4x_3 + 4x_4 - 2x_5 + 1x_6 + 3x_8 + 1x_{14} &= 85.60028248 \\ +3x_1 - 2x_2 - 4x_3 - 5x_4 - 4x_6 + 2x_7 + 4x_8 + 1x_{15} &= -90.49858712 \\ -2x_2 - 1x_3 + 5x_4 + 3x_5 - 4x_7 - 1x_8 + 1x_{16} &= 24.13017399 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 12
Student ID: 16147669

Minimise: $z = +5x_1 + 4x_2 - 7x_3 + 4x_4 + 2x_5 - 7x_6 + 1x_8$

Constraint Equations:

$$\begin{aligned} -2x_1 - 2x_2 + 1x_3 - 5x_4 + 1x_5 + 3x_7 + 1x_9 &= -32.04113821 \\ +4x_1 + 3x_2 - 3x_3 + 3x_4 - 3x_5 + 2x_7 + 3x_8 + 1x_{10} &= 51.80018887 \\ +5x_1 + 1x_2 - 1x_3 - 4x_4 + 3x_5 - 1x_6 + 3x_7 - 1x_8 + 1x_{11} &= 8.58529837 \\ -4x_1 - 5x_2 + 5x_3 - 3x_4 + 2x_5 + 4x_6 + 1x_7 - 2x_8 + 1x_{12} &= 64.71019413 \\ +3x_1 - 3x_2 - 2x_4 + 1x_5 + 3x_6 + 4x_7 + 4x_8 + 1x_{13} &= 98.79884173 \\ -3x_1 + 4x_2 - 2x_3 + 5x_4 - 4x_5 - 2x_6 + 5x_7 + 3x_8 + 1x_{14} &= 89.89251863 \\ +2x_2 - 4x_3 + 3x_4 + 4x_5 + 4x_6 - 2x_7 + 1x_{15} &= 75.88416564 \\ -3x_1 - 2x_2 + 2x_3 + 2x_4 + 3x_5 + 3x_6 + 1x_7 - 3x_8 + 1x_{16} &= 113.88223071 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 13
Student ID: 16173864

Minimise: $z = -4x_1 - 5x_3 + 5x_4 + 1x_5 - 6x_6 + 5x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} -1x_2 - 1x_3 - 3x_4 + 1x_5 - 3x_6 + 2x_7 + 2x_8 + 1x_9 &= -28.62025008 \\ -4x_1 - 4x_2 + 2x_3 + 1x_4 - 2x_5 + 2x_6 + 5x_7 + 3x_8 + 1x_{10} &= 35.94027615 \\ +1x_1 - 1x_3 + 2x_4 + 2x_6 + 2x_7 - 1x_8 + 1x_{11} &= 44.76562642 \\ +1x_1 + 4x_2 - 1x_3 - 1x_4 - 1x_5 + 2x_6 - 2x_7 + 4x_8 + 1x_{12} &= 103.68799927 \\ +4x_1 + 3x_2 + 4x_3 + 2x_4 - 3x_6 + 4x_7 + 5x_8 + 1x_{13} &= 258.95815629 \\ +2x_1 + 2x_2 + 1x_3 - 5x_4 - 5x_5 + 4x_6 - 5x_7 + 3x_8 + 1x_{14} &= 79.20524011 \\ +4x_1 + 2x_2 - 5x_3 + 4x_4 - 3x_5 + 2x_6 - 1x_7 + 4x_8 + 1x_{15} &= 69.19985350 \\ +2x_1 - 4x_2 - 5x_3 + 1x_4 - 2x_5 + 3x_6 + 5x_7 + 2x_8 + 1x_{16} &= 4.75326279 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 14
Student ID: 16181484

Minimise: $z = +3x_2 - 2x_4 - 4x_5 - 1x_6 - 1x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 - 3x_2 - 2x_4 + 1x_5 - 2x_6 + 2x_7 + 3x_8 + 1x_9 &= -22.75118377 \\ +2x_1 + 1x_2 - 2x_3 - 2x_4 + 3x_5 + 4x_6 + 1x_7 + 5x_8 + 1x_{10} &= 79.44536557 \\ +4x_1 + 1x_2 + 1x_3 - 2x_4 + 4x_5 + 2x_6 - 1x_7 + 5x_8 + 1x_{11} &= 54.80265149 \\ +2x_1 + 4x_2 - 1x_3 + 4x_4 + 4x_5 - 5x_6 + 1x_7 + 1x_8 + 1x_{12} &= 87.20309981 \\ -1x_2 - 1x_3 - 1x_4 + 3x_5 + 2x_7 + 3x_8 + 1x_{13} &= 38.07266602 \\ +3x_4 + 3x_5 - 5x_6 - 4x_7 - 3x_8 + 1x_{14} &= -46.17694897 \\ +2x_1 + 4x_2 + 5x_3 - 1x_5 - 3x_6 + 1x_7 + 5x_8 + 1x_{15} &= 35.03970533 \\ -4x_1 - 2x_3 + 2x_5 + 4x_6 - 2x_7 - 1x_8 + 1x_{16} &= 20.86740157 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 15
Student ID: 14143399

Minimise: $z = +2x_1 - 7x_2 + 5x_3 + 3x_4 - 5x_5 - 7x_6 + 3x_7 + 1x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 - 5x_2 - 4x_3 + 4x_4 - 2x_5 + 4x_7 - 3x_8 + 1x_9 &= -75.19694199 \\ +3x_1 + 3x_2 + 5x_3 - 1x_4 + 4x_5 + 3x_6 + 2x_7 - 2x_8 + 1x_{10} &= 185.58597481 \\ -2x_1 + 1x_2 + 4x_3 + 2x_4 - 2x_5 + 2x_6 + 2x_7 - 3x_8 + 1x_{11} &= 41.63915578 \\ -4x_1 - 2x_2 + 4x_3 - 5x_4 + 4x_5 + 3x_6 + 4x_7 - 3x_8 + 1x_{12} &= -72.38561214 \\ -1x_1 + 3x_2 + 5x_4 - 5x_7 + 1x_{13} &= 85.83084899 \\ -2x_1 - 2x_2 + 2x_4 - 4x_5 + 2x_6 - 4x_8 + 1x_{14} &= -88.15815646 \\ +3x_1 + 2x_3 + 2x_4 + 1x_5 - 2x_6 + 3x_7 + 2x_8 + 1x_{15} &= 108.86761865 \\ +3x_3 - 1x_4 - 3x_5 + 4x_6 + 2x_7 - 3x_8 + 1x_{16} &= 32.04702664 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 16
Student ID: 14148528

Minimise: $z = +4x_1 + 4x_2 - 2x_3 + 2x_4 - 4x_5 - 7x_6 - 6x_7 - 3x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 - 3x_2 - 2x_3 - 1x_5 + 2x_6 + 5x_7 + 4x_8 + 1x_9 &= -12.39842382 \\ -4x_1 + 1x_3 + 5x_4 - 2x_5 - 3x_6 + 2x_7 + 1x_{10} &= 3.43763390 \\ +2x_1 + 4x_2 + 5x_3 - 3x_4 - 1x_5 - 2x_7 + 3x_8 + 1x_{11} &= 124.93962593 \\ +2x_1 + 4x_2 + 4x_3 - 4x_4 + 3x_5 + 2x_7 - 3x_8 + 1x_{12} &= 109.95101969 \\ -3x_1 + 3x_2 - 4x_3 - 1x_4 + 5x_5 + 1x_6 + 5x_8 + 1x_{13} &= 75.81860663 \\ +4x_1 + 3x_3 + 5x_4 + 4x_5 + 1x_6 + 4x_7 + 1x_8 + 1x_{14} &= 253.44343103 \\ -4x_1 + 2x_2 - 2x_3 + 4x_4 - 4x_5 + 4x_6 + 3x_7 - 3x_8 + 1x_{15} &= -77.10841018 \\ +3x_1 - 1x_3 - 2x_4 - 2x_6 + 4x_7 - 1x_8 + 1x_{16} &= 29.02521478 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 17
Student ID: 15141217

Minimise: $z = +3x_1 - 3x_2 - 7x_3 + 3x_4 + 4x_5 + 1x_6 - 1x_7 - 6x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 + 4x_2 + 4x_3 + 4x_4 + 3x_5 - 4x_6 + 1x_7 - 2x_8 + 1x_9 &= 68.21252898 \\ -4x_1 + 2x_2 + 3x_3 - 1x_4 - 3x_5 + 2x_6 + 4x_7 + 5x_8 + 1x_{10} &= 84.53916062 \\ -5x_1 - 2x_2 + 1x_3 + 3x_4 + 2x_5 + 1x_6 - 3x_7 + 4x_8 + 1x_{11} &= 64.78361406 \\ +3x_1 - 1x_2 + 2x_3 + 1x_4 - 1x_5 + 3x_6 - 3x_7 - 2x_8 + 1x_{12} &= 44.28241395 \\ -1x_1 + 3x_2 - 3x_3 + 1x_4 - 5x_5 + 2x_6 - 5x_7 + 4x_8 + 1x_{13} &= 3.15385094 \\ -3x_1 - 4x_2 + 3x_4 - 3x_5 + 5x_6 - 3x_7 + 2x_8 + 1x_{14} &= 32.76430150 \\ +1x_1 - 1x_2 + 1x_3 + 4x_4 + 3x_5 - 1x_6 + 1x_7 - 1x_8 + 1x_{15} &= 61.06313277 \\ -2x_1 - 1x_2 - 4x_3 + 2x_4 - 1x_5 - 4x_6 - 2x_7 + 4x_8 + 1x_{16} &= -40.88773102 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 18
Student ID: 16171454

Minimise: $z = +4x_1 - 5x_2 - 2x_3 + 3x_4 - 6x_5 + 2x_6 + 3x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} -1x_1 + 3x_2 + 4x_4 + 3x_5 + 2x_6 + 2x_7 + 1x_9 &= 215.83550913 \\ -5x_1 - 1x_3 + 2x_4 - 3x_5 + 4x_7 - 1x_8 + 1x_{10} &= -7.28511269 \\ +3x_1 - 5x_2 - 2x_3 - 2x_4 + 4x_5 + 2x_7 + 3x_8 + 1x_{11} &= 23.64186457 \\ +4x_2 + 2x_3 + 1x_4 + 4x_5 + 4x_7 - 2x_8 + 1x_{12} &= 201.63935238 \\ +3x_1 + 4x_2 - 2x_3 + 1x_4 - 2x_6 + 2x_7 + 5x_8 + 1x_{13} &= 157.76873294 \\ +1x_1 + 5x_2 + 5x_3 - 3x_4 + 1x_5 + 4x_6 + 3x_8 + 1x_{14} &= 253.83856219 \\ +4x_1 - 1x_2 + 3x_3 + 1x_4 - 4x_5 - 2x_6 + 2x_7 + 3x_8 + 1x_{15} &= 70.24529196 \\ +5x_1 - 1x_2 + 1x_3 + 5x_4 + 5x_5 - 3x_6 - 2x_7 - 4x_8 + 1x_{16} &= 26.30402826 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 19
Student ID: 9633499

Minimise: $z = +5x_1 - 1x_2 - 1x_3 + 5x_4 - 1x_5 - 3x_6 + 3x_7 - 2x_8$
Constraint Equations:

$$\begin{aligned} +5x_2 + 1x_3 - 4x_5 - 1x_6 - 1x_7 + 4x_8 + 1x_9 &= 7.30020102 \\ -4x_1 - 1x_2 + 5x_3 + 4x_4 + 2x_5 - 4x_7 - 2x_8 + 1x_{10} &= 45.41902213 \\ -2x_1 - 4x_2 + 1x_3 + 2x_4 - 2x_5 - 3x_6 - 2x_7 + 3x_8 + 1x_{11} &= -1.66389553 \\ +3x_1 - 4x_3 + 5x_4 - 2x_5 + 3x_6 - 3x_7 + 1x_8 + 1x_{12} &= 38.46583376 \\ +4x_1 - 3x_2 + 2x_5 - 1x_6 - 2x_7 - 3x_8 + 1x_{13} &= -10.66602996 \\ -2x_1 - 2x_2 + 3x_3 + 2x_4 + 2x_5 + 4x_6 + 3x_7 + 1x_{14} &= 129.06076625 \\ -2x_1 + 3x_2 + 1x_3 - 3x_5 - 3x_6 - 4x_7 + 4x_8 + 1x_{15} &= -62.13215909 \\ +4x_1 + 4x_2 + 5x_4 + 2x_5 + 3x_6 - 2x_7 + 2x_8 + 1x_{16} &= 127.26453021 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 20
Student ID: 16154177

Minimise: $z = -4x_1 + 5x_2 + 2x_3 - 6x_4 + 1x_5 - 3x_6 - 5x_7 - 5x_8$
Constraint Equations:

$$\begin{aligned} -2x_1 - 1x_2 + 3x_4 - 2x_5 - 4x_6 + 4x_7 + 4x_8 + 1x_9 &= 63.68806326 \\ -2x_1 + 2x_2 + 2x_3 + 3x_5 + 3x_7 - 4x_8 + 1x_{10} &= 10.44090890 \\ -3x_1 + 2x_2 + 5x_3 - 2x_4 - 3x_5 - 1x_6 + 1x_7 - 2x_8 + 1x_{11} &= -30.38005652 \\ -1x_1 - 1x_2 + 4x_3 + 2x_4 + 4x_5 + 3x_6 + 3x_7 + 3x_8 + 1x_{12} &= 150.83506452 \\ -4x_1 - 1x_2 - 4x_3 - 2x_4 - 3x_5 + 3x_6 + 3x_7 + 3x_8 + 1x_{13} &= -83.45097365 \\ +4x_1 + 2x_2 + 1x_3 - 4x_4 - 2x_6 + 3x_7 - 2x_8 + 1x_{14} &= 5.65014975 \\ +4x_1 + 4x_2 + 2x_3 + 1x_4 - 4x_5 - 2x_6 - 1x_7 + 4x_8 + 1x_{15} &= 140.47809731 \\ +2x_1 - 1x_2 - 4x_4 - 1x_5 + 4x_6 + 3x_7 + 5x_8 + 1x_{16} &= 43.51947210 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 21
Student ID: 17244979

Minimise: $z = +2x_1 - 6x_2 + 4x_3 + 4x_4 + 3x_5 - 5x_6 - 1x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 + 4x_2 + 1x_3 - 1x_4 - 2x_5 + 1x_6 - 3x_8 + 1x_9 &= 77.31287213 \\ +3x_1 + 1x_2 - 1x_3 - 4x_4 - 3x_5 + 2x_7 + 1x_{10} &= 77.89137827 \\ -4x_1 + 2x_2 + 3x_4 - 2x_5 + 4x_7 + 2x_8 + 1x_{11} &= 26.71295411 \\ +5x_1 + 2x_2 + 1x_3 - 2x_4 - 1x_5 + 2x_7 + 1x_8 + 1x_{12} &= 156.96694923 \\ +4x_1 - 1x_2 - 1x_3 + 4x_4 + 3x_5 - 3x_6 - 4x_7 + 2x_8 + 1x_{13} &= -32.32069249 \\ +4x_1 + 3x_2 + 2x_3 + 1x_4 - 5x_5 + 1x_6 + 5x_7 - 3x_8 + 1x_{14} &= 197.89432144 \\ -1x_1 + 4x_2 - 2x_3 + 2x_4 + 1x_6 + 4x_7 - 2x_8 + 1x_{15} &= 114.27797425 \\ -2x_3 - 3x_4 - 2x_5 + 5x_6 + 3x_7 + 1x_8 + 1x_{16} &= 86.95608755 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 22
Student ID: 16168097

Minimise: $z = +4x_1 - 5x_2 - 5x_3 + 2x_4 - 5x_5 - 1x_6 + 3x_7 - 5x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 - 1x_2 - 4x_4 + 3x_5 + 4x_6 - 3x_8 + 1x_9 &= 57.19348940 \\ +4x_1 - 2x_2 + 1x_3 + 2x_4 - 1x_6 - 4x_7 + 1x_{10} &= 26.54717235 \\ +2x_1 + 2x_2 - 1x_3 + 1x_4 + 2x_5 - 4x_6 - 4x_7 + 1x_{11} &= 31.64013362 \\ +3x_1 + 1x_2 + 4x_3 + 3x_4 + 2x_5 - 1x_6 - 4x_7 - 2x_8 + 1x_{12} &= 43.99741200 \\ -4x_1 + 1x_2 + 3x_3 + 2x_4 + 4x_5 + 1x_6 - 3x_7 - 1x_8 + 1x_{13} &= 8.77037441 \\ -3x_1 + 2x_2 + 2x_3 + 3x_5 - 2x_6 + 4x_7 - 1x_8 + 1x_{14} &= 32.44393990 \\ +3x_1 - 2x_2 - 5x_3 + 5x_4 - 5x_5 - 3x_6 - 4x_7 + 5x_8 + 1x_{15} &= -31.23385507 \\ +1x_1 - 2x_2 - 4x_3 + 3x_4 - 5x_5 - 1x_6 + 5x_8 + 1x_{16} &= -28.39587436 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 23
Student ID: 16177932

Minimise: $z = -2x_1 - 3x_2 + 3x_3 + 5x_4 - 4x_5 + 5x_6 + 6x_7 - 4x_8$

Constraint Equations:

$$\begin{aligned} +5x_1 - 3x_2 - 2x_3 + 5x_4 + 1x_5 + 2x_6 - 4x_7 + 3x_8 + 1x_9 &= 74.63527290 \\ -3x_1 - 2x_2 + 4x_3 + 3x_4 - 2x_5 - 2x_6 + 4x_7 + 3x_8 + 1x_{10} &= 82.32527970 \\ -3x_1 - 3x_2 + 3x_3 - 3x_4 - 1x_5 + 1x_6 - 1x_7 + 3x_8 + 1x_{11} &= -52.31473324 \\ +2x_1 - 2x_3 - 2x_4 - 3x_5 - 5x_6 + 5x_7 + 2x_8 + 1x_{12} &= 20.48770606 \\ -5x_1 - 4x_3 - 2x_4 - 4x_6 + 5x_7 + 1x_8 + 1x_{13} &= -35.90063722 \\ +4x_1 + 3x_2 + 2x_3 - 2x_4 + 1x_5 - 2x_6 + 1x_7 + 1x_8 + 1x_{14} &= 65.74248427 \\ +5x_1 - 2x_3 - 3x_4 + 1x_5 + 3x_6 + 3x_7 - 1x_8 + 1x_{15} &= 37.36403673 \\ -2x_1 - 3x_2 - 4x_3 - 2x_4 - 4x_5 - 1x_6 - 4x_7 + 2x_8 + 1x_{16} &= -140.08611661 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 24
Student ID: 16170628

Minimise: $z = -3x_1 - 5x_2 - 6x_3 + 2x_4 - 7x_6 - 1x_7 + 4x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 + 3x_2 - 1x_3 - 3x_6 + 2x_7 - 4x_8 + 1x_9 &= 70.57194296 \\ -1x_1 - 1x_2 + 5x_3 + 2x_4 - 2x_5 + 4x_6 - 4x_7 + 2x_8 + 1x_{10} &= 42.06930092 \\ +5x_2 + 4x_3 + 2x_4 + 4x_7 + 4x_8 + 1x_{11} &= 230.23834430 \\ +3x_3 + 1x_4 + 5x_6 + 4x_7 - 4x_8 + 1x_{12} &= 110.64229173 \\ -5x_1 + 2x_2 + 4x_3 + 4x_4 + 1x_5 - 4x_6 + 3x_7 + 2x_8 + 1x_{13} &= 180.49318833 \\ -4x_2 - 1x_4 - 3x_5 + 1x_6 - 1x_7 - 1x_8 + 1x_{14} &= -117.66852989 \\ -2x_2 - 4x_4 - 1x_5 + 2x_6 + 3x_7 - 4x_8 + 1x_{15} &= -87.17219700 \\ +5x_1 + 1x_2 + 1x_3 - 2x_4 - 5x_6 + 1x_7 - 1x_8 + 1x_{16} &= 45.25976032 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 25
Student ID: 16188462

Minimise: $z = -3x_2 - 2x_3 - 3x_4 + 1x_5 - 7x_6 - 1x_7 + 5x_8$

Constraint Equations:

$$\begin{aligned} +5x_2 + 3x_3 - 1x_4 - 1x_5 - 5x_6 + 2x_7 + 2x_8 + 1x_9 &= 125.07900851 \\ -2x_1 - 5x_2 + 1x_3 + 2x_4 + 3x_5 - 1x_6 - 3x_7 + 1x_{10} &= -87.19016311 \\ -4x_1 + 2x_2 + 3x_3 - 1x_4 - 3x_5 - 3x_6 - 1x_7 + 4x_8 + 1x_{11} &= -16.90467232 \\ +1x_1 - 1x_2 + 2x_3 + 4x_5 - 4x_6 - 1x_8 + 1x_{12} &= 54.99213390 \\ -3x_2 + 1x_3 - 1x_4 - 3x_5 + 1x_7 - 2x_8 + 1x_{13} &= -56.85096533 \\ -3x_1 - 3x_2 - 2x_3 + 2x_4 + 2x_5 - 4x_6 + 1x_7 + 4x_8 + 1x_{14} &= -114.52377530 \\ -5x_1 + 3x_2 - 5x_3 + 2x_4 - 1x_5 + 1x_6 + 2x_7 - 3x_8 + 1x_{15} &= -101.64302015 \\ +1x_1 + 4x_2 + 1x_3 - 1x_4 - 2x_5 + 5x_6 + 3x_7 - 1x_8 + 1x_{16} &= 127.38439677 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 26
Student ID: 16174925

Minimise: $z = -7x_1 + 3x_2 - 5x_3 + 2x_4 + 4x_5 + 1x_6 - 6x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 - 2x_2 + 1x_3 - 1x_4 - 2x_5 - 1x_6 + 1x_8 + 1x_9 &= -30.60191228 \\ -1x_2 + 5x_3 - 4x_4 + 4x_5 + 3x_6 + 1x_7 + 1x_8 + 1x_{10} &= 165.16288152 \\ -1x_1 + 1x_2 + 3x_3 + 1x_4 + 1x_5 + 5x_6 + 3x_7 + 4x_8 + 1x_{11} &= 169.30854347 \\ +2x_2 - 3x_3 + 1x_4 - 3x_5 - 2x_6 - 3x_7 + 1x_{12} &= -115.04646913 \\ +4x_1 + 5x_3 - 4x_4 - 3x_5 + 4x_6 - 3x_7 - 3x_8 + 1x_{13} &= -6.21673571 \\ +5x_1 - 2x_2 + 3x_3 + 2x_4 - 3x_5 + 3x_6 - 2x_7 - 1x_8 + 1x_{14} &= 5.71113853 \\ -1x_1 + 5x_2 + 4x_3 + 1x_4 + 1x_5 - 5x_6 - 1x_7 - 3x_8 + 1x_{15} &= 37.98792108 \\ -5x_2 + 4x_3 + 3x_5 - 4x_7 - 1x_8 + 1x_{16} &= 40.27561980 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 27
Student ID: 16164822

Minimise: $z = -3x_1 + 5x_2 - 4x_3 + 3x_4 - 1x_5 + 3x_6 - 4x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} &+4x_1 + 1x_2 + 5x_3 + 3x_4 - 2x_6 - 1x_7 + 1x_9 = 144.56741722 \\ -1x_1 - 5x_2 + 3x_3 - 1x_4 + 1x_5 + 3x_6 - 2x_7 - 3x_8 + 1x_{10} &= 13.26695485 \\ &+3x_2 - 1x_3 - 2x_4 + 2x_5 + 5x_6 + 5x_7 + 1x_8 + 1x_{11} = 138.33238148 \\ &-2x_2 + 5x_3 - 3x_4 + 2x_5 + 2x_6 + 1x_7 - 2x_8 + 1x_{12} = 113.78432357 \\ -2x_1 + 2x_2 + 3x_3 - 5x_4 + 1x_5 + 3x_6 - 3x_7 + 2x_8 + 1x_{13} &= 13.71402228 \\ &-1x_1 + 3x_3 + 4x_4 - 3x_6 - 2x_7 + 3x_8 + 1x_{14} = 6.26091105 \\ &+4x_1 - 4x_2 + 2x_3 + 3x_5 + 3x_6 + 1x_7 + 3x_8 + 1x_{15} = 145.81754922 \\ &+3x_1 + 1x_2 - 1x_3 + 1x_4 - 5x_5 + 2x_7 - 3x_8 + 1x_{16} = 21.01605683 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 28
Student ID: 15150135

Minimise: $z = -2x_1 - 4x_2 + 3x_4 - 1x_5 - 2x_6 - 1x_7 + 5x_8$

Constraint Equations:

$$\begin{aligned} -5x_1 + 4x_2 + 4x_3 + 2x_4 - 1x_5 - 1x_6 - 1x_7 + 3x_8 + 1x_9 &= 49.70166357 \\ &-3x_1 - 2x_2 + 1x_3 + 2x_4 + 1x_5 - 3x_6 + 3x_7 + 1x_{10} = 2.97711436 \\ +4x_1 + 5x_2 - 1x_3 + 3x_4 - 3x_5 - 1x_6 + 2x_7 + 3x_8 + 1x_{11} &= 67.85333570 \\ &+1x_2 - 3x_3 - 2x_4 - 1x_5 + 3x_6 + 5x_8 + 1x_{12} = 3.09808331 \\ +2x_1 - 5x_2 + 4x_3 - 3x_4 + 2x_5 + 4x_6 - 1x_7 + 5x_8 + 1x_{13} &= 69.04801997 \\ &-1x_1 + 2x_2 + 3x_3 + 4x_4 + 3x_5 - 5x_6 + 1x_8 + 1x_{14} = 20.04728114 \\ +1x_1 - 1x_2 + 3x_3 - 3x_4 - 2x_5 + 4x_6 - 5x_7 + 2x_8 + 1x_{15} &= 11.79498024 \\ &+2x_1 + 1x_2 - 2x_4 + 1x_6 - 1x_7 - 1x_8 + 1x_{16} = -2.40935268 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 29
Student ID: 16179005

Minimise: $z = -2x_1 + 4x_2 - 7x_3 - 3x_4 - 2x_5 - 2x_6 - 4x_7 + 4x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 - 1x_2 + 3x_4 + 1x_5 + 2x_6 + 2x_7 + 1x_8 + 1x_9 &= 69.97195701 \\ -1x_1 + 4x_2 - 3x_3 - 4x_4 + 4x_5 - 1x_6 + 4x_7 + 4x_8 + 1x_{10} &= 59.83798510 \\ -5x_1 + 5x_2 - 2x_3 - 2x_4 - 2x_5 + 4x_6 - 1x_7 - 4x_8 + 1x_{11} &= -33.45561547 \\ -1x_2 + 1x_4 - 2x_5 + 4x_6 - 5x_8 + 1x_{12} &= -32.62586674 \\ -3x_1 + 4x_2 + 5x_3 + 4x_4 + 1x_5 - 3x_6 + 3x_7 - 3x_8 + 1x_{13} &= 36.97662368 \\ -5x_1 + 4x_2 - 4x_3 - 4x_4 + 4x_5 + 3x_7 - 2x_8 + 1x_{14} &= -86.69392579 \\ +2x_1 + 3x_2 + 2x_3 + 5x_4 + 5x_6 - 1x_7 + 1x_{15} &= 228.91504475 \\ -3x_1 - 3x_2 - 3x_3 + 2x_4 + 3x_6 - 3x_7 + 2x_8 + 1x_{16} &= 21.02544715 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 30
Student ID: 16170571

Minimise: $z = +4x_1 + 4x_2 + 5x_4 - 5x_5 - 3x_6 + 1x_7 + 2x_8$

Constraint Equations:

$$\begin{aligned} -5x_1 + 5x_2 + 2x_3 + 1x_5 + 2x_6 + 4x_7 + 2x_8 + 1x_9 &= 91.05635280 \\ +4x_1 - 3x_2 + 4x_3 + 2x_4 + 2x_5 + 2x_6 - 2x_8 + 1x_{10} &= 127.59807930 \\ -2x_1 - 2x_2 + 2x_3 + 1x_4 + 2x_6 - 1x_7 - 3x_8 + 1x_{11} &= -50.43753406 \\ +5x_1 + 3x_2 - 2x_3 + 3x_4 - 4x_5 + 3x_6 + 2x_7 + 2x_8 + 1x_{12} &= 139.38510478 \\ -4x_1 - 4x_2 + 5x_3 + 2x_4 - 2x_5 + 3x_6 + 4x_7 + 5x_8 + 1x_{13} &= 45.54673539 \\ +4x_1 - 2x_2 + 5x_3 - 2x_4 + 2x_5 + 1x_6 + 3x_7 + 4x_8 + 1x_{14} &= 207.37559354 \\ +1x_1 + 1x_2 + 3x_3 + 2x_4 - 2x_5 + 2x_6 - 2x_7 + 4x_8 + 1x_{15} &= 133.71428230 \\ -1x_1 + 3x_2 + 5x_3 - 4x_4 - 1x_5 - 5x_6 + 3x_7 - 2x_8 + 1x_{16} &= -5.16913191 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 31
Student ID: 16187822

Minimise: $z = -6x_1 + 2x_2 - 3x_3 - 5x_4 + 3x_5 - 1x_6 - 5x_7 + 6x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 + 1x_2 + 2x_3 + 1x_4 - 1x_5 + 1x_6 + 4x_7 + 2x_8 + 1x_9 &= 103.95825495 \\ +3x_1 + 4x_2 - 2x_3 - 1x_4 + 5x_5 + 1x_6 + 2x_7 - 2x_8 + 1x_{10} &= 111.21332682 \\ -3x_1 + 2x_2 - 3x_4 - 1x_5 - 4x_6 + 1x_7 + 1x_8 + 1x_{11} &= -126.94096627 \\ +3x_1 + 3x_2 + 3x_3 + 3x_4 - 3x_5 - 4x_6 + 2x_7 + 2x_8 + 1x_{12} &= 49.82092402 \\ +3x_1 + 2x_2 + 2x_3 + 1x_4 - 3x_5 + 2x_6 + 2x_7 + 4x_8 + 1x_{13} &= 121.49838941 \\ -4x_1 + 1x_2 + 4x_3 - 2x_4 - 1x_5 - 3x_6 - 3x_7 + 3x_8 + 1x_{14} &= -107.03953111 \\ +5x_1 + 2x_2 + 1x_3 - 3x_4 + 3x_5 - 3x_6 + 2x_7 - 2x_8 + 1x_{15} &= -14.92156352 \\ -4x_1 - 4x_2 - 3x_3 - 2x_4 + 5x_6 + 5x_7 - 4x_8 + 1x_{16} &= -25.93860912 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 32
Student ID: 8715599

Minimise: $z = -3x_1 - 5x_2 - 3x_3 - 6x_4 - 6x_5 - 4x_6 - 2x_7 - 4x_8$

Constraint Equations:

$$\begin{aligned} +2x_1 + 4x_2 - 3x_3 - 4x_4 + 3x_5 + 2x_6 - 5x_7 + 4x_8 + 1x_9 &= 44.58979401 \\ +2x_1 + 1x_3 - 3x_4 + 5x_5 + 1x_6 + 5x_7 + 2x_8 + 1x_{10} &= 88.30690903 \\ +2x_1 - 4x_2 - 3x_3 + 1x_4 + 2x_5 + 4x_6 - 1x_7 - 2x_8 + 1x_{11} &= 19.82685887 \\ -1x_1 + 2x_2 + 4x_3 + 1x_4 + 1x_5 + 3x_6 + 5x_7 + 2x_8 + 1x_{12} &= 143.78632106 \\ +2x_1 - 2x_2 - 4x_3 - 3x_4 + 3x_5 - 1x_6 - 4x_7 - 1x_8 + 1x_{13} &= -83.77879735 \\ -2x_1 - 3x_2 - 1x_3 + 4x_4 - 1x_5 + 2x_6 - 2x_7 + 4x_8 + 1x_{14} &= 99.98497747 \\ -4x_1 - 2x_2 + 2x_3 + 4x_4 + 3x_5 + 3x_6 - 4x_7 - 2x_8 + 1x_{15} &= 71.87913773 \\ +3x_1 - 4x_2 + 3x_3 + 4x_4 + 3x_5 - 3x_6 - 4x_7 + 5x_8 + 1x_{16} &= 199.73591138 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 33
Student ID: 16173198

Minimise: $z = +5x_1 - 4x_2 + 4x_3 - 6x_4 - 5x_5 + 5x_7 - 3x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 - 5x_2 - 3x_3 + 2x_4 + 3x_5 - 2x_6 + 3x_7 - 4x_8 + 1x_9 &= -30.27440383 \\ +4x_1 - 3x_2 + 2x_3 + 1x_4 + 4x_5 + 3x_6 + 4x_7 + 1x_8 + 1x_{10} &= 83.38740744 \\ +4x_1 - 4x_3 + 2x_4 - 1x_6 - 2x_7 - 3x_8 + 1x_{11} &= -40.33339255 \\ +2x_1 - 3x_2 + 1x_3 + 1x_4 - 2x_6 + 3x_7 + 1x_{12} &= 36.42831754 \\ +2x_1 + 3x_2 - 4x_3 + 5x_4 + 4x_5 - 1x_6 + 1x_8 + 1x_{13} &= 46.18271020 \\ +4x_1 - 3x_2 - 3x_3 + 1x_5 + 5x_6 + 5x_7 + 1x_8 + 1x_{14} &= 49.95548244 \\ -4x_1 + 4x_2 - 3x_3 - 2x_4 - 1x_5 + 5x_6 - 5x_7 + 5x_8 + 1x_{15} &= -55.80054468 \\ +4x_1 + 4x_3 + 2x_4 - 3x_5 + 4x_6 + 3x_7 + 1x_{16} &= 103.85984289 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 34
Student ID: 16170172

Minimise: $z = +4x_1 - 4x_2 - 4x_3 - 6x_4 + 1x_5 - 2x_6 - 7x_7 - 6x_8$

Constraint Equations:

$$\begin{aligned} +5x_1 - 4x_3 + 4x_4 - 2x_5 + 1x_6 - 5x_7 + 3x_8 + 1x_9 &= 17.12038995 \\ +1x_2 - 5x_3 - 1x_4 + 3x_5 + 2x_6 + 2x_7 + 4x_8 + 1x_{10} &= -3.51110255 \\ -2x_1 + 3x_2 + 4x_3 + 4x_4 + 2x_5 + 5x_6 - 2x_7 + 2x_8 + 1x_{11} &= 166.58981253 \\ -2x_1 + 4x_2 + 3x_3 + 4x_4 - 2x_6 + 2x_7 - 5x_8 + 1x_{12} &= 90.42108567 \\ +4x_1 - 5x_2 + 2x_3 - 5x_6 + 2x_7 - 2x_8 + 1x_{13} &= 62.61132432 \\ +5x_1 - 2x_2 + 2x_3 - 5x_4 + 2x_5 - 4x_6 + 4x_8 + 1x_{14} &= 26.96011228 \\ +4x_1 - 3x_2 - 1x_3 + 2x_4 + 4x_5 - 1x_6 + 2x_7 + 5x_8 + 1x_{15} &= 168.83699503 \\ -2x_2 + 3x_3 + 3x_4 + 1x_5 + 2x_6 + 1x_7 - 4x_8 + 1x_{16} &= 121.05976058 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 35
Student ID: 17189926

Minimise: $z = -5x_1 - 6x_2 + 4x_3 + 4x_4 + 2x_5 - 3x_6 - 1x_7 + 6x_8$

Constraint Equations:

$$\begin{aligned} &+2x_1 + 1x_3 - 2x_4 + 5x_5 + 5x_7 + 1x_8 + 1x_9 = 140.90976094 \\ &+2x_1 + 3x_2 - 1x_3 + 4x_5 - 3x_6 - 1x_7 + 5x_8 + 1x_{10} = 96.61306746 \\ &+2x_2 + 2x_3 - 1x_4 + 1x_6 + 4x_7 + 5x_8 + 1x_{11} = 134.64062430 \\ &+2x_1 - 3x_2 - 3x_3 - 4x_4 + 1x_5 + 2x_6 + 1x_7 + 5x_8 + 1x_{12} = 61.16725910 \\ &-2x_1 - 1x_3 - 2x_4 + 3x_5 - 5x_6 - 4x_7 - 3x_8 + 1x_{13} = -181.69960077 \\ &-1x_1 - 3x_2 + 3x_3 - 4x_4 - 1x_5 - 2x_6 + 5x_7 + 3x_8 + 1x_{14} = 1.12723306 \\ &+1x_1 - 3x_2 - 1x_3 + 2x_4 + 2x_5 - 3x_6 - 2x_7 - 4x_8 + 1x_{15} = -70.80299486 \\ &-3x_1 - 2x_2 - 3x_3 + 3x_4 + 2x_5 + 1x_6 + 2x_7 + 4x_8 + 1x_{16} = 56.64460459 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 36
Student ID: 16177568

Minimise: $z = +5x_1 - 1x_2 - 1x_3 - 2x_4 + 4x_5 - 3x_6 - 2x_7 + 6x_8$

Constraint Equations:

$$\begin{aligned} &+3x_1 + 4x_2 - 2x_3 + 2x_4 + 4x_5 + 5x_6 + 2x_7 - 1x_8 + 1x_9 = 185.20546955 \\ &+3x_1 + 2x_2 + 2x_3 + 5x_4 + 2x_5 - 4x_6 - 3x_7 + 2x_8 + 1x_{10} = 89.78164125 \\ &-5x_1 - 1x_2 - 4x_3 + 2x_4 - 3x_5 + 2x_6 + 4x_7 + 1x_{11} = -3.01372709 \\ &+3x_1 - 2x_2 + 2x_3 + 5x_4 - 5x_5 + 5x_6 + 3x_7 + 3x_8 + 1x_{12} = 139.17449537 \\ &+1x_2 - 4x_3 - 4x_4 - 5x_5 + 3x_6 + 3x_8 + 1x_{13} = 0.28040090 \\ &-1x_1 + 1x_2 - 1x_3 + 5x_4 - 5x_5 + 2x_6 - 4x_7 + 3x_8 + 1x_{14} = 39.32904923 \\ &+2x_2 + 2x_3 - 4x_4 + 5x_5 + 4x_6 + 3x_7 - 4x_8 + 1x_{15} = 31.88227209 \\ &+4x_1 + 3x_2 + 4x_3 + 1x_4 - 4x_5 + 3x_6 + 2x_7 - 2x_8 + 1x_{16} = 46.89545264 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 37
Student ID: 17192307

Minimise: $z = +2x_1 - 6x_3 + 2x_4 + 1x_5 - 4x_6 - 7x_7 + 2x_8$

Constraint Equations:

$$\begin{aligned} +5x_1 + 4x_2 + 1x_3 + 3x_4 + 2x_5 - 2x_6 + 4x_7 - 2x_8 + 1x_9 &= 150.52489288 \\ -4x_2 + 4x_3 + 3x_4 - 5x_5 - 4x_6 + 1x_7 + 1x_8 + 1x_{10} &= -9.12715696 \\ +3x_2 - 2x_4 - 2x_5 - 2x_6 + 3x_7 - 2x_8 + 1x_{11} &= 8.06469754 \\ -4x_1 - 3x_2 + 1x_3 + 1x_4 - 3x_5 + 3x_6 - 2x_7 - 4x_8 + 1x_{12} &= -63.34651384 \\ +5x_1 - 2x_2 + 4x_4 - 2x_5 - 3x_7 + 1x_8 + 1x_{13} &= 63.66869129 \\ +1x_1 - 3x_2 - 3x_3 - 3x_4 + 3x_5 + 3x_6 + 2x_7 + 4x_8 + 1x_{14} &= 2.36740130 \\ +5x_1 + 3x_2 - 2x_3 + 4x_4 - 1x_5 - 1x_6 - 4x_7 - 2x_8 + 1x_{15} &= 75.56174162 \\ -3x_2 + 3x_3 - 1x_4 - 4x_5 - 1x_7 + 2x_8 + 1x_{16} &= -41.00521510 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 38
Student ID: 16164547

Minimise: $z = +6x_1 - 3x_3 - 1x_4 + 5x_5 - 3x_6 + 1x_7 - 1x_8$

Constraint Equations:

$$\begin{aligned} -2x_1 + 4x_2 - 4x_3 - 3x_5 + 4x_6 - 2x_7 + 3x_8 + 1x_9 &= 55.45781778 \\ -3x_1 + 1x_2 + 3x_3 + 2x_4 - 1x_5 - 2x_6 + 2x_7 - 2x_8 + 1x_{10} &= 36.98241392 \\ +1x_1 - 2x_2 + 2x_3 + 4x_4 + 5x_7 + 3x_8 + 1x_{11} &= 114.17980406 \\ +1x_1 + 5x_2 + 1x_3 + 3x_4 - 3x_5 + 1x_6 - 2x_7 - 4x_8 + 1x_{12} &= 86.13178072 \\ -3x_1 + 2x_2 - 4x_3 + 5x_4 + 3x_5 - 3x_6 + 4x_7 - 3x_8 + 1x_{13} &= 21.07464207 \\ -1x_1 + 5x_2 - 3x_3 - 1x_4 - 2x_6 + 3x_7 - 4x_8 + 1x_{14} &= -34.41365145 \\ +3x_1 + 1x_2 - 2x_3 + 3x_4 + 4x_5 + 1x_6 + 2x_7 - 1x_8 + 1x_{15} &= 56.98793722 \\ +3x_1 - 1x_2 + 5x_3 + 4x_4 - 3x_5 + 2x_6 - 5x_7 + 4x_8 + 1x_{16} &= 166.22314470 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 39
Student ID: 16111699

Minimise: $z = -6x_1 + 1x_2 + 3x_3 - 2x_4 - 3x_5 - 3x_6 - 3x_7 - 1x_8$

Constraint Equations:

$$\begin{aligned} -3x_1 - 1x_2 - 3x_3 + 5x_5 + 2x_6 - 2x_7 + 4x_8 + 1x_9 &= 79.37716365 \\ +1x_1 - 4x_2 + 3x_4 + 4x_5 - 4x_6 - 1x_7 + 2x_8 + 1x_{10} &= 46.33120294 \\ -3x_1 - 2x_2 + 4x_3 - 2x_4 + 3x_5 + 2x_6 + 2x_7 + 3x_8 + 1x_{11} &= 54.12157766 \\ +4x_1 - 2x_3 - 3x_5 + 3x_6 - 5x_7 + 2x_8 + 1x_{12} &= -43.35491673 \\ +5x_2 + 3x_3 + 4x_4 - 2x_7 - 2x_8 + 1x_{13} &= 55.52402289 \\ +5x_1 - 5x_2 - 3x_4 - 2x_5 + 2x_7 + 1x_{14} &= -82.50472501 \\ +1x_1 + 5x_2 - 3x_3 - 3x_4 + 1x_5 - 1x_6 - 5x_8 + 1x_{15} &= -16.32881604 \\ +2x_1 - 1x_2 + 1x_3 - 5x_4 + 2x_6 + 5x_7 - 3x_8 + 1x_{16} &= -43.39009134 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 40
Student ID: 16148606

Minimise: $z = -4x_2 + 6x_3 - 6x_4 + 1x_5 - 6x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 - 4x_2 + 2x_3 - 5x_4 + 1x_5 - 1x_6 + 1x_8 + 1x_9 &= -18.44543851 \\ +2x_1 - 1x_2 + 1x_3 + 2x_4 - 5x_5 + 2x_6 + 1x_7 + 2x_8 + 1x_{10} &= 19.72107434 \\ +2x_1 + 2x_2 + 3x_3 + 1x_4 + 1x_6 - 3x_7 + 1x_8 + 1x_{11} &= 48.99009578 \\ -3x_1 + 2x_2 + 2x_3 - 3x_4 + 2x_5 - 2x_6 + 1x_7 + 4x_8 + 1x_{12} &= 36.36420715 \\ +5x_1 - 1x_3 + 1x_4 - 4x_5 + 3x_6 + 5x_7 + 4x_8 + 1x_{13} &= 112.43828529 \\ -2x_1 + 5x_2 + 2x_3 + 3x_4 - 4x_5 - 2x_6 + 4x_7 + 1x_8 + 1x_{14} &= 121.66741626 \\ +1x_1 + 2x_2 + 3x_3 + 4x_4 + 1x_5 - 2x_6 + 4x_7 - 1x_8 + 1x_{15} &= 213.98729653 \\ +1x_1 + 1x_2 - 3x_3 - 4x_4 + 3x_5 + 1x_6 - 1x_8 + 1x_{16} &= -47.28589502 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 41
Student ID: 16148991

Minimise: $z = -6x_1 - 6x_2 - 5x_3 - 4x_4 - 6x_5 + 2x_6 + 1x_7 + 4x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 - 2x_2 - 3x_3 + 1x_4 - 4x_5 - 5x_6 - 3x_8 + 1x_9 &= -148.75962402 \\ +2x_1 + 2x_2 + 1x_3 + 2x_4 + 3x_7 + 2x_8 + 1x_{10} &= 135.47675032 \\ +1x_1 + 5x_2 + 4x_5 + 2x_6 + 4x_7 - 3x_8 + 1x_{11} &= 79.87702710 \\ +5x_1 - 2x_2 + 2x_5 + 3x_6 + 2x_7 - 1x_8 + 1x_{12} &= 51.36364123 \\ +2x_1 + 4x_2 + 1x_3 + 5x_4 - 2x_5 + 3x_6 + 1x_7 + 2x_8 + 1x_{13} &= 192.63396740 \\ -1x_1 - 5x_2 + 4x_4 - 4x_5 + 3x_7 - 3x_8 + 1x_{14} &= -38.68284214 \\ +3x_1 + 4x_2 + 1x_3 - 3x_4 + 1x_5 + 2x_6 - 3x_7 + 3x_8 + 1x_{15} &= 59.80509484 \\ -5x_2 - 2x_3 + 4x_4 - 3x_5 + 5x_6 - 4x_7 - 3x_8 + 1x_{16} &= -73.93645945 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 42
Student ID: 16192036

Minimise: $z = -1x_1 + 5x_3 - 4x_4 - 1x_5 + 5x_6 + 1x_7$

Constraint Equations:

$$\begin{aligned} +3x_1 + 3x_2 + 1x_3 - 3x_4 + 4x_5 + 4x_6 - 2x_7 - 3x_8 + 1x_9 &= 83.75085794 \\ +3x_3 - 3x_4 + 1x_5 + 1x_6 + 2x_7 + 1x_8 + 1x_{10} &= 31.66827950 \\ -1x_1 - 1x_2 - 3x_3 - 3x_4 + 4x_5 - 1x_6 + 3x_7 - 1x_8 + 1x_{11} &= -34.01573441 \\ +4x_1 + 2x_2 + 1x_4 + 1x_5 + 1x_6 - 3x_7 - 1x_8 + 1x_{12} &= 90.86022737 \\ +4x_2 - 2x_3 - 2x_4 - 5x_5 - 4x_7 + 4x_8 + 1x_{13} &= -90.97769970 \\ +4x_1 - 1x_2 - 5x_3 - 2x_4 - 4x_5 + 1x_6 - 3x_7 + 1x_{14} &= -120.21551399 \\ -3x_1 + 2x_2 + 4x_3 - 3x_4 - 2x_5 - 3x_6 - 3x_7 + 2x_8 + 1x_{15} &= -88.53977851 \\ +3x_1 + 1x_2 + 4x_3 + 5x_4 - 5x_5 + 4x_6 - 1x_7 + 1x_8 + 1x_{16} &= 140.66352726 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 43
Student ID: 15162966

Minimise: $z = +2x_1 - 5x_3 + 6x_4 + 6x_5 - 5x_6 - 2x_7 + 2x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 - 4x_2 + 3x_3 - 1x_4 + 4x_5 + 1x_6 - 1x_7 + 4x_8 + 1x_9 &= 98.14627617 \\ -2x_1 + 3x_2 + 1x_3 + 4x_4 + 2x_5 + 5x_6 + 2x_7 - 4x_8 + 1x_{10} &= 35.87662228 \\ -4x_1 + 2x_2 - 1x_4 + 3x_5 + 3x_6 + 1x_7 + 5x_8 + 1x_{11} &= 98.89273901 \\ +4x_1 + 2x_2 + 5x_3 - 5x_4 + 2x_5 - 2x_6 + 5x_7 + 4x_8 + 1x_{12} &= 259.56262584 \\ -4x_2 + 4x_3 + 2x_4 - 2x_5 - 5x_6 + 3x_7 - 1x_8 + 1x_{13} &= 8.34176054 \\ +5x_1 + 5x_2 - 1x_3 + 2x_5 + 2x_6 + 4x_7 + 5x_8 + 1x_{14} &= 240.63932464 \\ -1x_1 + 3x_2 + 1x_3 + 1x_4 - 3x_5 - 3x_6 + 3x_7 - 2x_8 + 1x_{15} &= 13.27653466 \\ +3x_1 + 1x_2 - 1x_4 - 3x_5 - 2x_6 - 5x_7 + 1x_8 + 1x_{16} &= -6.65539931 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 44
Student ID: 16160304

Minimise: $z = -6x_1 - 4x_2 - 2x_3 - 7x_4 - 3x_5 - 3x_6 - 3x_7 + 1x_8$

Constraint Equations:

$$\begin{aligned} -3x_1 - 4x_2 + 1x_3 - 5x_4 + 2x_5 + 4x_6 - 5x_8 + 1x_9 &= -145.39776994 \\ -1x_1 - 3x_2 - 3x_3 - 5x_4 + 2x_5 + 3x_6 - 4x_7 - 1x_8 + 1x_{10} &= -145.25740440 \\ +2x_1 + 1x_2 - 3x_3 + 4x_4 + 4x_5 - 3x_6 - 2x_8 + 1x_{11} &= 104.44480697 \\ +2x_1 - 1x_2 + 1x_3 - 1x_5 - 2x_6 + 1x_7 + 5x_8 + 1x_{12} &= 29.67921850 \\ -5x_1 + 1x_2 + 3x_3 - 2x_4 + 3x_5 - 1x_6 + 3x_7 - 1x_8 + 1x_{13} &= 20.21418477 \\ -3x_1 + 4x_3 + 3x_4 + 1x_5 + 2x_6 + 4x_8 + 1x_{14} &= 60.21711429 \\ +5x_2 + 1x_3 + 1x_5 + 1x_6 + 2x_7 - 1x_8 + 1x_{15} &= 138.50906644 \\ +5x_1 - 1x_2 - 4x_4 + 2x_5 - 4x_6 - 2x_7 - 3x_8 + 1x_{16} &= -27.61749048 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 45
Student ID: 16180062

Minimise: $z = -7x_1 - 2x_2 - 2x_3 - 2x_4 - 4x_5 - 5x_6 - 6x_7 - 5x_8$

Constraint Equations:

$$\begin{aligned} -2x_1 + 4x_2 - 4x_3 + 5x_4 + 4x_5 + 2x_6 + 5x_7 - 3x_8 + 1x_9 &= 142.44753758 \\ +4x_1 + 2x_2 - 2x_3 - 3x_4 - 2x_6 + 4x_7 - 3x_8 + 1x_{10} &= 50.88526753 \\ -3x_1 - 2x_2 - 4x_3 - 5x_5 - 1x_6 + 2x_7 - 1x_8 + 1x_{11} &= -104.50659344 \\ -1x_1 + 3x_4 + 2x_5 + 2x_6 - 4x_7 + 4x_8 + 1x_{12} &= 20.06142595 \\ +1x_1 + 4x_4 + 2x_5 - 4x_6 - 2x_7 + 4x_8 + 1x_{13} &= 13.45333812 \\ +3x_1 + 1x_2 + 1x_3 + 4x_4 + 3x_5 + 1x_8 + 1x_{14} &= 91.09340546 \\ -2x_1 - 4x_2 - 3x_3 - 3x_4 + 2x_6 + 4x_7 - 2x_8 + 1x_{15} &= -4.83938210 \\ -4x_1 + 2x_2 + 1x_4 - 3x_5 - 3x_6 + 1x_7 - 2x_8 + 1x_{16} &= -78.61145060 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 46
Student ID: 16188373

Minimise: $z = -3x_1 + 1x_2 - 5x_3 - 3x_4 + 5x_5 + 3x_6 - 4x_7$

Constraint Equations:

$$\begin{aligned} -2x_1 + 5x_2 + 2x_3 + 3x_4 + 4x_5 + 1x_6 + 3x_8 + 1x_9 &= 113.93946595 \\ -1x_1 + 1x_2 - 4x_3 + 4x_4 + 5x_5 + 1x_6 + 4x_7 + 4x_8 + 1x_{10} &= 90.29223718 \\ +2x_1 - 2x_2 + 4x_3 - 1x_4 + 3x_5 + 1x_6 - 4x_7 - 1x_8 + 1x_{11} &= 34.49581043 \\ +3x_1 + 4x_2 - 2x_3 + 5x_5 + 4x_6 - 2x_8 + 1x_{12} &= 117.93641740 \\ +1x_1 + 5x_3 - 3x_4 - 5x_5 - 4x_7 + 1x_{13} &= -37.35357843 \\ -5x_1 + 1x_3 + 4x_4 - 1x_5 + 5x_6 - 1x_7 + 1x_{14} &= 12.95360818 \\ -3x_2 + 1x_3 - 2x_4 - 5x_5 - 1x_6 - 4x_7 + 4x_8 + 1x_{15} &= -104.82036820 \\ +1x_1 - 2x_2 - 1x_3 + 2x_4 + 1x_5 - 1x_6 - 4x_7 - 2x_8 + 1x_{16} &= -46.18496170 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 47
Student ID: 16166787

Minimise: $z = -7x_1 - 2x_2 + 3x_3 - 5x_4 - 5x_5 + 6x_6 + 5x_7 + 5x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 + 2x_2 - 3x_3 - 3x_4 + 1x_5 + 4x_6 + 3x_7 + 5x_8 + 1x_9 &= 152.94597439 \\ +5x_1 + 1x_3 + 1x_4 + 5x_5 + 2x_7 + 3x_8 + 1x_{10} &= 239.01852192 \\ -4x_1 + 1x_2 - 4x_3 + 4x_4 + 2x_5 + 3x_6 + 1x_7 - 4x_8 + 1x_{11} &= 49.63784123 \\ -4x_1 - 3x_4 - 2x_5 - 2x_6 + 4x_8 + 1x_{12} &= -104.36339539 \\ +2x_1 - 4x_2 + 1x_3 - 2x_4 + 3x_6 - 4x_7 + 4x_8 + 1x_{13} &= -9.64997756 \\ -3x_1 + 3x_2 + 2x_3 - 2x_4 + 1x_5 - 2x_6 + 4x_7 - 5x_8 + 1x_{14} &= -42.90931025 \\ -3x_1 - 2x_3 + 5x_4 + 3x_6 - 1x_7 - 1x_8 + 1x_{15} &= 66.67074834 \\ -4x_1 - 3x_2 + 4x_3 + 5x_4 - 3x_6 - 2x_7 + 1x_8 + 1x_{16} &= -4.07189965 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 48
Student ID: 16181034

Minimise: $z = +1x_1 + 3x_2 - 6x_3 - 2x_4 - 2x_5 + 1x_6 + 2x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 + 5x_2 + 2x_4 - 3x_5 - 1x_6 - 2x_7 + 2x_8 + 1x_9 &= 107.52973348 \\ +3x_1 + 4x_2 + 2x_3 + 2x_4 - 2x_5 + 1x_6 - 4x_7 - 3x_8 + 1x_{10} &= 35.62017990 \\ +3x_1 - 4x_2 + 2x_3 + 4x_4 + 1x_5 - 4x_6 + 4x_7 + 1x_8 + 1x_{11} &= 24.75933597 \\ -4x_1 + 2x_2 + 2x_3 - 3x_4 + 3x_6 + 4x_8 + 1x_{12} &= 83.27867837 \\ -5x_1 + 3x_2 + 4x_3 + 2x_4 + 2x_5 + 3x_7 - 1x_8 + 1x_{13} &= 124.09246222 \\ -4x_1 - 2x_2 - 1x_3 + 5x_4 + 2x_5 + 1x_6 - 2x_7 + 5x_8 + 1x_{14} &= 161.35016282 \\ -1x_1 + 2x_3 + 2x_4 - 5x_5 + 3x_6 - 3x_7 + 1x_8 + 1x_{15} &= -1.86096061 \\ +3x_1 + 5x_2 + 3x_3 - 2x_4 - 2x_5 + 1x_6 + 2x_7 - 4x_8 + 1x_{16} &= -16.85532154 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 49
Student ID: 16155122

Minimise: $z = -5x_1 - 1x_2 + 1x_3 - 5x_4 + 3x_5 - 3x_6 + 3x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 + 4x_2 - 1x_3 + 3x_4 + 4x_5 + 3x_6 - 4x_7 + 4x_8 + 1x_9 &= 135.80163126 \\ +2x_1 + 2x_2 - 5x_3 + 5x_4 + 1x_5 + 3x_6 - 1x_7 + 1x_{10} &= 37.54494651 \\ -4x_1 - 1x_3 + 3x_5 + 4x_6 + 2x_7 - 2x_8 + 1x_{11} &= 41.54708457 \\ -2x_3 - 1x_4 + 1x_5 + 5x_6 + 4x_7 + 1x_{12} &= 122.24931935 \\ +4x_1 + 5x_2 - 3x_3 + 4x_4 - 3x_5 + 1x_6 + 2x_7 - 5x_8 + 1x_{13} &= -16.00187497 \\ -3x_1 + 5x_2 - 1x_3 - 1x_4 - 4x_5 + 5x_6 + 3x_7 + 5x_8 + 1x_{14} &= 172.04705909 \\ -2x_1 - 3x_2 + 2x_3 + 4x_4 - 3x_5 + 2x_6 - 5x_7 - 3x_8 + 1x_{15} &= -75.13190527 \\ -1x_1 - 4x_2 + 5x_3 + 3x_4 + 4x_5 - 3x_6 - 1x_7 + 2x_8 + 1x_{16} &= 1.24035964 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 50
Student ID: 16190874

Minimise: $z = -4x_1 - 4x_2 - 3x_3 - 5x_4 + 2x_5 + 1x_6 - 3x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 - 3x_2 - 4x_3 + 3x_4 + 3x_5 - 1x_6 - 5x_7 - 1x_8 + 1x_9 &= -44.75481791 \\ -1x_1 + 3x_2 - 4x_3 + 4x_4 + 2x_5 - 1x_6 + 5x_7 + 5x_8 + 1x_{10} &= 188.55982772 \\ -2x_1 + 5x_2 + 3x_3 + 3x_4 + 1x_5 - 3x_6 + 4x_7 - 3x_8 + 1x_{11} &= 111.97513626 \\ +3x_1 + 3x_2 - 3x_3 + 4x_4 + 2x_5 + 2x_6 - 3x_7 - 2x_8 + 1x_{12} &= 177.61781375 \\ -3x_1 + 2x_3 - 4x_5 - 3x_6 + 5x_7 + 4x_8 + 1x_{13} &= -61.42434170 \\ -2x_1 - 4x_2 - 5x_3 + 2x_4 + 1x_5 + 1x_6 + 4x_7 + 1x_8 + 1x_{14} &= -4.86158186 \\ -4x_1 - 2x_2 - 3x_3 + 4x_7 + 4x_8 + 1x_{15} &= -34.76816683 \\ +2x_1 + 4x_2 + 4x_3 + 3x_4 + 5x_6 + 5x_7 - 4x_8 + 1x_{16} &= 292.55212221 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 51
Student ID: 16175476

Minimise: $z = -1x_1 + 2x_2 + 5x_3 - 5x_4 - 2x_5 + 2x_6 - 2x_7 + 1x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 + 3x_2 + 4x_3 - 4x_4 + 5x_5 - 3x_6 - 1x_7 - 4x_8 + 1x_9 &= 44.38867331 \\ +1x_1 - 2x_2 + 3x_3 - 4x_4 + 3x_7 + 3x_8 + 1x_{10} &= -32.64169032 \\ +3x_1 - 3x_2 + 4x_3 + 3x_4 + 3x_5 - 1x_6 + 4x_7 + 2x_8 + 1x_{11} &= 150.24628256 \\ -2x_1 + 2x_2 - 2x_4 + 1x_5 + 4x_6 + 2x_8 + 1x_{12} &= -29.84565743 \\ -1x_1 + 1x_2 - 4x_5 + 4x_6 + 4x_7 - 2x_8 + 1x_{13} &= -9.81643120 \\ -4x_1 + 2x_2 + 4x_3 + 1x_5 - 1x_7 - 3x_8 + 1x_{14} &= -57.79452036 \\ +2x_1 - 1x_3 + 1x_6 + 5x_7 - 5x_8 + 1x_{15} &= 43.90250785 \\ +5x_1 - 5x_2 + 2x_3 + 2x_4 - 3x_5 - 3x_6 + 3x_7 + 1x_{16} &= 77.72644256 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 52
Student ID: 17243599

Minimise: $z = -1x_1 + 1x_2 - 5x_4 + 2x_5 + 3x_6 + 5x_7 - 6x_8$

Constraint Equations:

$$\begin{aligned} +3x_1 + 5x_2 + 3x_3 + 3x_4 + 1x_5 - 1x_6 + 1x_9 &= 89.14015237 \\ +4x_2 + 1x_3 + 5x_5 - 5x_6 + 1x_7 + 4x_8 + 1x_{10} &= 70.99753282 \\ +3x_2 + 1x_3 - 4x_4 + 4x_5 + 1x_6 + 1x_7 - 3x_8 + 1x_{11} &= -62.00419626 \\ -2x_1 + 1x_2 + 4x_3 + 2x_4 - 2x_5 - 3x_6 + 1x_{12} &= -11.71206711 \\ +2x_1 + 4x_2 - 4x_3 + 4x_4 - 1x_5 + 1x_6 - 1x_8 + 1x_{13} &= 63.22236168 \\ +2x_1 + 1x_3 - 3x_4 + 4x_5 - 2x_6 - 1x_7 + 4x_8 + 1x_{14} &= 43.88411770 \\ +5x_1 + 4x_2 + 4x_3 - 1x_5 + 4x_6 - 3x_7 + 5x_8 + 1x_{15} &= 159.34934697 \\ +4x_1 + 1x_2 - 5x_3 + 3x_4 - 1x_5 - 1x_6 + 2x_7 + 2x_8 + 1x_{16} &= 104.64377977 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 53
Student ID: 16155459

Minimise: $z = -6x_2 + 6x_3 + 4x_4 + 5x_6 - 6x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 - 4x_2 - 2x_3 + 1x_5 - 3x_6 + 1x_7 + 2x_8 + 1x_9 &= -3.10373568 \\ -1x_1 + 5x_2 + 1x_3 + 1x_4 + 2x_5 - 1x_6 + 3x_7 - 1x_8 + 1x_{10} &= 71.13380423 \\ +5x_1 + 3x_2 + 2x_3 + 3x_4 - 2x_5 - 1x_6 + 4x_7 - 2x_8 + 1x_{11} &= 89.94804794 \\ -3x_1 - 1x_2 - 2x_3 - 3x_4 + 1x_5 + 2x_6 + 2x_7 - 2x_8 + 1x_{12} &= -17.45669812 \\ +5x_1 + 4x_2 + 3x_3 + 2x_5 - 4x_6 - 1x_7 - 1x_8 + 1x_{13} &= 19.73030366 \\ -1x_1 + 3x_2 + 1x_4 - 1x_5 - 3x_6 + 4x_7 - 3x_8 + 1x_{14} &= -5.50509695 \\ +3x_1 - 5x_2 + 3x_3 - 1x_4 - 3x_5 + 3x_6 + 4x_7 + 5x_8 + 1x_{15} &= 107.84823567 \\ -1x_1 - 3x_2 + 1x_3 + 4x_4 + 4x_5 + 3x_6 + 4x_7 - 2x_8 + 1x_{16} &= 185.97501682 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 54
Student ID: 16167422

Minimise: $z = -1x_1 + 2x_2 - 2x_3 - 6x_4 - 1x_6 + 1x_7 - 7x_8$

Constraint Equations:

$$\begin{aligned} -1x_2 + 4x_3 + 1x_4 - 3x_5 - 4x_6 - 2x_7 + 5x_8 + 1x_9 &= -71.03667746 \\ +4x_1 - 2x_2 + 1x_3 - 4x_4 - 3x_5 - 3x_6 + 1x_7 + 5x_8 + 1x_{10} &= -87.99265125 \\ -3x_1 + 4x_2 - 5x_3 - 3x_4 - 1x_5 - 2x_6 - 2x_7 - 4x_8 + 1x_{11} &= -183.21493544 \\ +5x_1 - 1x_2 + 1x_4 - 4x_5 + 2x_6 + 1x_7 + 4x_8 + 1x_{12} &= 64.83581421 \\ +4x_1 + 4x_2 + 3x_3 + 5x_4 - 3x_5 + 1x_7 + 2x_8 + 1x_{13} &= 224.41525866 \\ +5x_2 + 3x_3 + 2x_4 - 1x_5 - 2x_6 - 1x_7 + 5x_8 + 1x_{14} &= 115.78891924 \\ +5x_1 + 1x_2 - 5x_3 - 3x_4 - 1x_5 + 2x_6 + 2x_7 + 3x_8 + 1x_{15} &= 24.46955516 \\ -3x_1 + 4x_2 + 3x_3 - 2x_4 + 5x_5 + 4x_7 - 5x_8 + 1x_{16} &= 162.59955156 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 55
Student ID: 16184033

Minimise: $z = -3x_1 + 2x_2 - 2x_3 - 6x_4 + 4x_5 + 2x_6 + 1x_7 + 4x_8$

Constraint Equations:

$$\begin{aligned} -1x_1 + 5x_2 + 5x_3 + 3x_4 + 1x_6 - 2x_7 - 5x_8 + 1x_9 &= -19.47325557 \\ +2x_3 + 4x_4 - 4x_5 - 3x_6 - 3x_7 - 5x_8 + 1x_{10} &= -84.04442559 \\ +3x_1 - 2x_2 + 4x_3 + 3x_4 - 3x_6 - 3x_7 + 2x_8 + 1x_{11} &= 81.35936622 \\ +1x_1 + 3x_2 + 4x_3 - 4x_4 + 3x_5 + 3x_6 + 4x_7 - 3x_8 + 1x_{12} &= 76.08436191 \\ -2x_1 - 2x_2 + 2x_3 + 3x_4 + 4x_5 + 3x_6 + 3x_7 - 1x_8 + 1x_{13} &= 92.78837793 \\ -4x_1 + 2x_2 - 3x_3 - 1x_4 + 5x_5 - 5x_6 + 3x_7 + 4x_8 + 1x_{14} &= 6.37852669 \\ -2x_1 - 3x_2 + 5x_3 - 2x_4 - 4x_5 - 3x_6 - 5x_7 - 3x_8 + 1x_{15} &= -157.75425359 \\ -4x_2 + 3x_3 + 1x_4 - 4x_5 - 5x_6 - 3x_7 + 2x_8 + 1x_{16} &= -16.47493431 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 56
Student ID: 16173945

Minimise: $z = -3x_1 - 5x_2 - 1x_3 + 2x_5 - 3x_7 + 2x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 + 2x_2 + 3x_3 - 2x_4 - 2x_6 + 2x_7 + 4x_8 + 1x_9 &= 45.94819406 \\ +5x_1 + 4x_2 - 4x_3 - 1x_4 - 2x_5 - 5x_6 + 2x_8 + 1x_{10} &= -65.13776497 \\ +1x_1 - 2x_2 - 1x_3 + 1x_4 + 1x_5 - 1x_6 - 3x_7 + 1x_8 + 1x_{11} &= -82.82414707 \\ +3x_1 - 2x_2 - 5x_3 - 1x_5 + 5x_6 + 3x_7 + 4x_8 + 1x_{12} &= 38.07802082 \\ +2x_1 - 5x_2 - 1x_3 - 1x_4 - 4x_5 + 3x_7 + 2x_8 + 1x_{13} &= -95.30693234 \\ +3x_1 - 4x_2 + 2x_3 + 5x_4 - 4x_5 - 4x_6 - 2x_7 + 4x_8 + 1x_{14} &= -150.01202628 \\ +4x_1 - 3x_2 + 3x_4 + 1x_5 + 3x_6 + 4x_8 + 1x_{15} &= 50.50826781 \\ +2x_2 - 2x_3 + 2x_4 - 2x_5 + 3x_6 + 5x_7 - 1x_8 + 1x_{16} &= 118.58382815 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 57
Student ID: 16179781

Minimise: $z = +3x_1 - 5x_2 + 5x_3 - 4x_4 - 6x_5 - 1x_6 + 4x_7 + 3x_8$

Constraint Equations:

$$\begin{aligned} -5x_1 + 3x_2 - 2x_4 + 3x_5 + 3x_6 + 5x_7 - 2x_8 + 1x_9 &= 82.62532459 \\ +1x_1 + 2x_2 + 2x_3 + 2x_5 - 5x_6 - 5x_7 + 1x_8 + 1x_{10} &= 1.53044438 \\ -4x_1 + 4x_2 - 3x_3 - 2x_4 + 3x_5 - 2x_7 + 4x_8 + 1x_{11} &= -2.19216394 \\ -4x_1 - 1x_2 + 2x_3 + 2x_4 + 5x_5 + 1x_6 - 1x_8 + 1x_{12} &= 8.04150694 \\ -4x_1 - 5x_2 - 2x_3 - 4x_4 - 5x_5 + 4x_6 + 4x_7 + 5x_8 + 1x_{13} &= -21.27729992 \\ -1x_1 - 3x_2 + 5x_3 - 1x_5 - 5x_6 + 3x_7 + 2x_8 + 1x_{14} &= 125.90696387 \\ +4x_1 + 2x_2 + 4x_3 - 2x_4 + 2x_5 - 2x_6 + 4x_7 - 5x_8 + 1x_{15} &= 128.53679699 \\ +5x_1 + 4x_2 + 2x_3 - 2x_4 + 2x_6 + 1x_7 + 5x_8 + 1x_{16} &= 204.05448323 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 58
Student ID: 16147383

Minimise: $z = -3x_1 - 6x_2 - 4x_3 - 1x_4 + 2x_5 - 1x_6 - 4x_7 + 1x_8$

Constraint Equations:

$$\begin{aligned} -1x_1 - 1x_2 - 1x_3 - 2x_4 + 3x_5 + 2x_6 + 2x_7 + 4x_8 + 1x_9 &= 119.36721838 \\ +1x_1 + 4x_2 - 2x_3 + 5x_4 + 1x_5 + 4x_6 + 5x_7 + 1x_{10} &= 251.54009441 \\ +4x_1 - 2x_2 - 2x_3 - 3x_5 - 4x_6 + 2x_8 + 1x_{11} &= -79.04518924 \\ -1x_1 + 3x_2 + 1x_3 - 4x_4 - 2x_5 - 4x_6 - 4x_7 + 4x_8 + 1x_{12} &= -52.92864237 \\ -5x_2 - 2x_3 + 3x_4 + 3x_5 + 3x_6 - 3x_7 - 3x_8 + 1x_{13} &= -72.03349863 \\ +1x_1 + 5x_2 + 3x_5 - 2x_6 - 3x_7 - 2x_8 + 1x_{14} &= 52.99705150 \\ +3x_1 - 1x_2 - 2x_4 - 3x_5 - 3x_7 + 3x_8 + 1x_{15} &= -16.86585041 \\ +4x_1 + 1x_3 + 3x_4 - 1x_5 - 1x_6 + 2x_7 + 4x_8 + 1x_{16} &= 152.96063523 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 59
Student ID: 16149726

Minimise: $z = +4x_1 - 3x_2 + 5x_3 - 6x_4 + 2x_5 - 2x_6 + 1x_7 - 3x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 + 4x_2 + 4x_3 + 4x_4 + 1x_7 + 2x_8 + 1x_9 &= 107.69280161 \\ -4x_2 + 1x_3 + 5x_4 + 2x_5 - 1x_6 + 4x_7 + 4x_8 + 1x_{10} &= 137.33215631 \\ -1x_1 - 1x_2 + 2x_3 + 1x_4 - 5x_5 + 3x_6 + 2x_7 + 1x_{11} &= 96.88770554 \\ +3x_1 + 1x_2 + 1x_3 - 4x_4 - 1x_5 + 1x_6 - 1x_7 - 4x_8 + 1x_{12} &= -68.60136066 \\ +2x_1 - 1x_2 + 3x_3 - 5x_4 + 5x_5 - 4x_6 - 4x_7 - 1x_8 + 1x_{13} &= -123.00075859 \\ -2x_1 - 5x_2 + 5x_3 + 3x_4 + 4x_5 - 4x_6 - 1x_7 + 2x_8 + 1x_{14} &= 18.25677035 \\ -3x_1 + 4x_2 - 3x_3 - 3x_4 - 4x_5 - 4x_6 - 1x_7 - 5x_8 + 1x_{15} &= -211.79290568 \\ -1x_1 + 1x_3 - 1x_4 - 3x_5 + 1x_6 - 2x_7 - 4x_8 + 1x_{16} &= -75.06896743 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 60
Student ID: 16157338

Minimise: $z = -4x_1 - 6x_2 - 6x_3 - 4x_4 - 2x_5 - 2x_6 + 2x_7 + 5x_8$

Constraint Equations:

$$\begin{aligned} -4x_1 + 3x_2 - 3x_3 + 1x_5 + 1x_6 + 3x_7 + 4x_8 + 1x_9 &= 17.00834364 \\ -3x_1 + 4x_3 + 4x_4 - 5x_5 - 2x_6 + 1x_7 + 4x_8 + 1x_{10} &= 0.05893689 \\ -1x_1 - 1x_2 - 3x_3 - 4x_4 + 1x_6 + 3x_7 - 2x_8 + 1x_{11} &= -65.95158706 \\ -4x_1 + 4x_2 - 2x_3 + 5x_4 + 5x_6 + 3x_7 + 3x_8 + 1x_{12} &= 122.63261852 \\ -1x_1 - 1x_2 - 3x_3 + 4x_4 - 4x_5 - 4x_6 + 2x_7 - 4x_8 + 1x_{13} &= -132.48319353 \\ +3x_1 + 3x_2 - 5x_3 + 2x_4 + 5x_5 + 4x_6 - 3x_7 - 4x_8 + 1x_{14} &= 87.17181912 \\ -2x_1 + 3x_2 + 1x_3 - 2x_4 + 1x_5 - 4x_6 - 1x_7 + 1x_8 + 1x_{15} &= -20.62327729 \\ +4x_1 + 3x_2 + 4x_3 + 4x_4 + 5x_5 - 3x_6 + 5x_7 + 1x_{16} &= 140.71975846 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 61
Student ID: 16188152

Minimise: $z = +1x_1 - 5x_2 - 7x_3 + 3x_4 - 2x_5 - 2x_6 - 3x_7$

Constraint Equations:

$$\begin{aligned} -1x_1 - 3x_2 + 1x_3 + 5x_4 - 4x_5 - 1x_6 + 5x_7 - 1x_8 + 1x_9 &= 45.83618165 \\ -3x_1 + 2x_2 - 2x_3 - 4x_4 - 2x_5 - 3x_6 + 4x_7 + 4x_8 + 1x_{10} &= -41.17666426 \\ -3x_1 - 4x_2 - 2x_3 + 1x_4 - 2x_5 + 4x_6 - 3x_7 - 2x_8 + 1x_{11} &= -82.16479899 \\ +2x_1 - 1x_2 - 4x_3 - 4x_6 + 4x_7 + 3x_8 + 1x_{12} &= 0.04801764 \\ -5x_1 + 3x_2 + 3x_3 + 3x_6 - 2x_7 + 4x_8 + 1x_{13} &= 4.91926976 \\ +3x_1 - 3x_2 - 3x_3 + 5x_4 - 4x_5 + 1x_7 + 1x_{14} &= 15.97582159 \\ +1x_1 + 1x_2 - 3x_3 - 4x_4 - 3x_5 + 4x_6 + 1x_7 + 4x_8 + 1x_{15} &= 45.99879081 \\ +1x_1 + 4x_2 + 2x_3 - 4x_4 + 4x_5 + 1x_7 + 5x_8 + 1x_{16} &= 86.77414397 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 62
Student ID: 16164016

Minimise: $z = -3x_1 - 5x_2 - 4x_3 - 4x_4 + 3x_5 + 3x_6 + 5x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 + 4x_2 - 2x_3 - 1x_4 + 2x_5 + 1x_6 - 1x_7 - 3x_8 + 1x_9 &= -62.70064145 \\ -5x_1 - 2x_2 + 5x_3 - 2x_4 - 4x_5 - 1x_6 + 4x_7 - 3x_8 + 1x_{10} &= -31.19661451 \\ -4x_1 - 3x_2 - 4x_3 - 2x_4 + 4x_5 - 4x_6 + 2x_8 + 1x_{11} &= -11.22400010 \\ +4x_1 - 2x_2 + 4x_3 + 4x_4 - 5x_6 + 1x_7 - 4x_8 + 1x_{12} &= -45.62247059 \\ -1x_1 - 4x_3 - 1x_4 + 3x_6 + 4x_7 - 3x_8 + 1x_{13} &= -70.19018073 \\ +4x_1 + 2x_2 + 3x_3 + 5x_4 - 4x_5 + 4x_6 + 2x_7 - 1x_8 + 1x_{14} &= 36.29731700 \\ -3x_1 - 1x_2 + 4x_3 - 1x_4 + 2x_5 + 4x_6 - 1x_7 + 2x_8 + 1x_{15} &= 110.31176742 \\ -3x_1 + 1x_2 - 3x_3 + 2x_4 - 3x_5 - 2x_6 + 4x_7 - 4x_8 + 1x_{16} &= -118.74973485 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 63
Student ID: 16161777

Minimise: $z = -6x_1 - 1x_2 + 1x_3 + 6x_4 - 3x_5 - 2x_6 + 1x_7 - 3x_8$

Constraint Equations:

$$\begin{aligned} +2x_1 + 2x_2 + 4x_3 + 5x_4 + 1x_6 - 4x_7 + 1x_8 + 1x_9 &= 93.20360636 \\ +4x_1 - 4x_2 - 4x_3 - 2x_5 - 2x_6 - 3x_7 + 2x_8 + 1x_{10} &= -3.10601571 \\ -5x_1 - 2x_2 + 2x_3 + 1x_4 - 3x_5 + 4x_6 + 4x_7 + 2x_8 + 1x_{11} &= 6.02619738 \\ +1x_1 - 5x_3 - 4x_4 - 2x_5 - 1x_6 + 5x_7 + 1x_{12} &= -20.27037889 \\ +3x_2 + 3x_3 + 2x_4 + 4x_5 + 5x_6 + 1x_7 - 2x_8 + 1x_{13} &= 101.88780418 \\ +2x_1 + 1x_2 + 3x_3 + 5x_4 + 5x_5 + 3x_7 + 1x_{14} &= 203.06657401 \\ +5x_1 - 1x_2 - 1x_3 - 2x_4 + 1x_5 + 4x_7 + 1x_{15} &= 104.54972994 \\ +1x_3 - 1x_4 - 1x_5 + 5x_6 + 2x_7 - 5x_8 + 1x_{16} &= 9.54665278 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 64
Student ID: 16178955

Minimise: $z = +2x_1 - 1x_2 + 2x_3 - 3x_4 + 4x_5 + 4x_6 - 3x_7 - 1x_8$

Constraint Equations:

$$\begin{aligned} +2x_2 + 1x_3 + 4x_4 + 4x_5 - 3x_6 + 1x_7 + 1x_8 + 1x_9 &= 157.11642012 \\ -3x_2 + 4x_3 - 3x_4 + 4x_6 - 1x_7 + 1x_{10} &= 17.03233947 \\ +2x_1 + 3x_2 + 4x_3 + 4x_4 - 3x_5 - 3x_6 + 1x_7 + 3x_8 + 1x_{11} &= 151.60101942 \\ -3x_1 + 4x_2 - 1x_3 + 1x_4 + 4x_5 - 3x_6 + 4x_7 - 2x_8 + 1x_{12} &= 48.65207896 \\ +1x_1 + 5x_2 - 1x_3 - 3x_4 + 2x_5 + 3x_6 + 4x_7 + 5x_8 + 1x_{13} &= 131.27384395 \\ +3x_1 - 1x_2 - 3x_3 + 2x_4 - 3x_5 + 3x_6 - 4x_7 - 3x_8 + 1x_{14} &= -87.32009158 \\ +3x_1 + 2x_2 - 4x_3 + 4x_4 + 3x_5 + 1x_6 + 1x_7 + 1x_8 + 1x_{15} &= 112.83705509 \\ +2x_1 + 1x_2 - 5x_4 - 3x_5 - 3x_6 - 2x_8 + 1x_{16} &= -114.81706255 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 65
Student ID: 15178102

Minimise: $z = -4x_1 - 2x_2 + 2x_3 - 3x_4 - 3x_5 - 5x_6 - 5x_7 - 2x_8$

Constraint Equations:

$$\begin{aligned} -3x_1 + 3x_2 - 1x_3 + 5x_4 + 2x_5 + 3x_6 + 2x_7 + 1x_8 + 1x_9 &= 122.84831550 \\ +3x_1 + 4x_2 + 2x_4 - 2x_5 + 1x_6 + 2x_7 + 3x_8 + 1x_{10} &= 104.90931459 \\ +2x_1 - 4x_2 - 5x_3 - 4x_4 + 2x_5 - 2x_6 + 5x_7 + 3x_8 + 1x_{11} &= 21.44013071 \\ +3x_1 + 3x_3 - 4x_4 + 4x_5 + 4x_6 + 2x_8 + 1x_{12} &= 94.49467954 \\ +4x_1 + 3x_2 - 4x_3 + 1x_4 + 4x_5 + 1x_6 + 1x_7 - 3x_8 + 1x_{13} &= 56.76992986 \\ +3x_1 - 2x_3 + 5x_4 + 4x_5 - 5x_6 - 4x_7 - 1x_8 + 1x_{14} &= 63.05162514 \\ -5x_1 + 3x_2 + 3x_3 + 4x_4 + 3x_5 - 2x_7 - 2x_8 + 1x_{15} &= 19.40995152 \\ -4x_1 + 4x_2 - 1x_3 + 4x_4 + 1x_5 - 4x_6 - 5x_7 + 1x_{16} &= -1.80912762 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 66
Student ID: 16161785

Minimise: $z = -3x_1 + 2x_2 - 7x_3 - 3x_4 + 5x_6 - 2x_8$

Constraint Equations:

$$\begin{aligned} +2x_1 + 1x_2 - 2x_3 - 3x_4 + 4x_5 + 2x_6 + 5x_7 + 2x_8 + 1x_9 &= 69.70925685 \\ +4x_1 - 3x_2 + 3x_3 - 3x_4 + 3x_5 + 1x_6 - 4x_7 + 2x_8 + 1x_{10} &= 16.90172997 \\ -2x_1 - 3x_2 + 4x_3 + 1x_5 + 4x_6 + 3x_7 + 1x_{11} &= 77.41340311 \\ -1x_2 + 5x_3 + 4x_4 - 5x_5 - 1x_6 + 2x_7 + 1x_{12} &= 86.92326415 \\ +3x_3 - 2x_4 + 4x_5 - 3x_6 + 5x_7 + 4x_8 + 1x_{13} &= 136.42483669 \\ +4x_1 - 4x_2 + 3x_3 - 1x_4 - 1x_5 - 4x_6 + 3x_7 + 3x_8 + 1x_{14} &= 57.28234272 \\ -1x_1 - 5x_2 - 4x_3 + 4x_4 - 3x_5 + 1x_6 - 3x_7 + 2x_8 + 1x_{15} &= -98.64963399 \\ +2x_1 - 4x_2 - 3x_3 - 4x_4 + 4x_5 - 1x_6 + 4x_7 + 2x_8 + 1x_{16} &= -30.71082267 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 67
Student ID: 17262291

Minimise: $z = +2x_1 - 1x_2 + 1x_3 - 1x_4 - 3x_6 + 4x_7 - 1x_8$

Constraint Equations:

$$\begin{aligned} +2x_1 + 4x_2 - 4x_3 - 5x_4 + 1x_5 + 1x_7 + 2x_8 + 1x_9 &= -6.63165420 \\ -2x_1 + 4x_2 - 3x_3 - 4x_4 + 5x_7 + 1x_8 + 1x_{10} &= -5.06230894 \\ -1x_1 - 4x_2 + 2x_3 + 4x_4 + 3x_5 - 1x_7 - 1x_8 + 1x_{11} &= 22.67730681 \\ -1x_1 + 3x_3 + 1x_4 + 1x_5 - 4x_6 - 2x_7 - 1x_8 + 1x_{12} &= 18.09331106 \\ +3x_1 + 4x_2 - 3x_3 + 4x_4 + 4x_6 + 4x_7 + 5x_8 + 1x_{13} &= 106.32983926 \\ +2x_1 + 2x_2 + 5x_3 - 2x_5 + 3x_6 + 2x_7 + 4x_8 + 1x_{14} &= 128.35437865 \\ -3x_1 + 2x_2 + 1x_3 + 5x_4 - 2x_5 - 3x_6 + 3x_7 + 3x_8 + 1x_{15} &= 33.17565753 \\ +3x_1 + 3x_2 + 5x_3 - 3x_4 + 4x_5 + 2x_6 + 5x_7 - 3x_8 + 1x_{16} &= 180.67621084 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 68
Student ID: 15147932

Minimise: $z = +1x_1 - 1x_2 + 1x_3 - 6x_4 - 1x_5 + 3x_6 - 4x_8$

Constraint Equations:

$$\begin{aligned} -1x_2 + 3x_3 - 5x_4 - 2x_5 + 3x_6 - 2x_8 + 1x_9 &= -115.22869220 \\ +1x_1 + 1x_2 + 4x_3 - 4x_4 - 5x_5 - 3x_6 + 2x_7 + 3x_8 + 1x_{10} &= -43.06550538 \\ +5x_1 - 4x_3 + 1x_4 + 3x_5 + 1x_6 + 5x_7 + 3x_8 + 1x_{11} &= 195.88667467 \\ +5x_1 - 2x_3 - 2x_4 + 3x_5 + 5x_6 + 4x_7 + 4x_8 + 1x_{12} &= 205.42276035 \\ +4x_1 + 2x_2 + 4x_3 - 2x_4 + 1x_5 - 2x_6 - 1x_7 + 3x_8 + 1x_{13} &= 153.82405601 \\ -3x_1 + 4x_2 + 4x_4 + 4x_5 + 4x_6 - 3x_7 + 2x_8 + 1x_{14} &= 183.24970794 \\ -5x_1 - 2x_2 + 3x_4 + 4x_5 - 2x_6 - 4x_7 + 1x_8 + 1x_{15} &= -7.32390290 \\ -2x_1 + 2x_2 - 1x_3 - 1x_4 + 3x_6 + 1x_7 + 5x_8 + 1x_{16} &= 80.39903523 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 69
Student ID: 17262283

Minimise: $z = +5x_2 - 3x_3 - 3x_4 - 3x_5 + 2x_6 - 2x_7 + 2x_8$

Constraint Equations:

$$\begin{aligned} +1x_1 - 2x_2 - 5x_3 - 2x_4 - 4x_5 - 5x_6 + 2x_7 + 1x_9 &= -162.82683291 \\ -4x_1 - 4x_2 - 3x_4 - 2x_5 + 2x_6 - 1x_7 + 1x_8 + 1x_{10} &= -51.34801428 \\ +4x_1 - 1x_3 + 5x_4 - 3x_5 + 2x_6 + 2x_7 - 1x_8 + 1x_{11} &= 48.70034768 \\ -3x_1 + 3x_2 - 1x_3 - 1x_4 + 1x_5 + 1x_6 - 3x_7 + 4x_8 + 1x_{12} &= 95.69927862 \\ -3x_1 - 1x_2 + 1x_3 + 3x_4 + 1x_5 + 1x_6 + 3x_7 + 1x_8 + 1x_{13} &= 62.81789054 \\ +3x_1 + 1x_2 + 4x_3 + 2x_4 + 2x_5 + 4x_6 - 2x_7 + 1x_{14} &= 134.41973543 \\ +2x_1 + 2x_2 + 1x_3 - 3x_4 + 1x_5 + 4x_6 + 4x_7 - 1x_8 + 1x_{15} &= 72.55081528 \\ -2x_1 - 4x_2 - 4x_3 + 4x_4 - 2x_5 - 4x_6 + 1x_8 + 1x_{16} &= -81.17623322 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 70
Student ID: 311693

Minimise: $z = +4x_1 + 1x_2 - 5x_3 - 4x_5 - 6x_6 - 2x_7 - 3x_8$

Constraint Equations:

$$\begin{aligned} +4x_1 + 2x_2 - 2x_4 - 1x_5 + 1x_6 + 1x_7 - 2x_8 + 1x_9 &= -37.71595390 \\ +1x_2 + 1x_3 + 4x_4 + 3x_5 - 2x_6 + 4x_7 + 3x_8 + 1x_{10} &= 197.91272719 \\ -4x_1 - 2x_2 + 2x_3 + 2x_5 + 1x_6 + 2x_7 + 2x_8 + 1x_{11} &= 75.67339344 \\ +4x_1 + 3x_2 + 2x_3 - 1x_4 - 1x_5 + 5x_6 - 4x_7 + 5x_8 + 1x_{12} &= 82.64852948 \\ +2x_1 + 3x_2 + 5x_3 - 4x_4 + 4x_5 + 3x_6 + 5x_7 + 1x_{13} &= 114.57160240 \\ -2x_1 - 4x_2 + 5x_3 - 3x_5 + 3x_6 - 3x_7 - 4x_8 + 1x_{14} &= -62.84705158 \\ -5x_1 + 4x_2 + 2x_3 + 2x_4 + 1x_5 + 2x_6 - 3x_8 + 1x_{15} &= 26.21951555 \\ -2x_2 + 3x_3 - 2x_4 + 4x_5 - 5x_6 + 5x_7 + 2x_8 + 1x_{16} &= 97.06417031 \end{aligned}$$

$$x_i \geq 0, i = 1, \dots, n.$$

Student Number: 71
Student ID: 8510954

Minimise: $z = +1x_1 - 2x_2 - 3x_3 - 6x_4 - 3x_5 + 3x_6 - 7x_8$

Constraint Equations:

$$+2x_1 + 4x_2 + 1x_4 - 2x_5 + 3x_6 + 5x_7 - 2x_8 + 1x_9 = 184.00659280$$

$$-2x_2 + 3x_3 + 3x_5 + 1x_6 + 5x_7 - 2x_8 + 1x_{10} = 97.64840252$$

$$+1x_1 - 4x_2 + 2x_3 - 1x_4 + 1x_5 + 4x_6 + 2x_7 + 1x_8 + 1x_{11} = 81.94359000$$

$$+2x_1 - 5x_2 + 4x_3 + 4x_4 + 3x_5 - 2x_6 + 3x_7 + 2x_8 + 1x_{12} = 28.88379534$$

$$+4x_1 - 5x_2 - 4x_3 + 5x_4 - 2x_5 - 3x_7 + 3x_8 + 1x_{13} = -69.32385098$$

$$+2x_1 - 1x_3 + 3x_4 + 1x_5 - 4x_6 + 4x_7 + 2x_8 + 1x_{14} = 39.34608058$$

$$-3x_1 + 3x_2 + 2x_3 - 3x_4 - 5x_5 + 4x_6 + 3x_7 + 3x_8 + 1x_{15} = 73.89002287$$

$$-1x_2 + 1x_3 - 2x_4 - 2x_5 + 3x_6 + 1x_7 + 3x_8 + 1x_{16} = 46.93496048$$

$$x_i \geq 0, i = 1, \dots, n.$$