**Change the price parameter of supplier 6**

**O6=1000**

Node Left Iinf Objective Best Relaxatn Best Incumbent

------ ------ ------ -------------- -------------- --------------

1 0 11 -1.870605e+003 -1.870605e+003 1.293214e+005

10 9 9 -1.824145e+003 -1.824920e+003 -1.441449e+003

\* 10 9 r -1.446819e+003

20 19 8 -1.568599e+003 -1.823603e+003 -1.476045e+003

30 25 -1.501708e+003 pr -1.791486e+003 -1.571101e+003

40 29 6 -1.760777e+003 -1.783674e+003 -1.571101e+003

\* 40 29 r -1.628748e+003

50 39 6 -1.779937e+003 -1.780385e+003 -1.634928e+003

60 45 7 -1.776198e+003 -1.776466e+003 -1.668623e+003

70 47 3 -1.764389e+003 -1.764691e+003 -1.756890e+003

80 53 -1.763439e+003 pr -1.763704e+003 -1.763668e+003

EXIT: Optimal solution found.

Final Statistics for MIP

------------------------

Final objective value = -1.76366811812837e+003

Final integrality gap (abs / rel) =-3.73e-007 / -2.11e-010 (-0.00)

# of nodes processed = 81

# of subproblems processed = 81

Total program time (secs) = 277.177 ( 277.744 CPU time)

Time spent in evaluations (secs) = 278.564

===========================================================================

>> x

x =

0 0 0 9 0 9 0 0 0 1 0 1 9 118 -2

**O6=2000**

Node Left Iinf Objective Best Relaxatn Best Incumbent

------ ------ ------ -------------- -------------- --------------

1 0 11 -1.802556e+003 -1.802556e+003 1.308214e+005

10 9 7 -1.628105e+003 -1.759959e+003 -1.356992e+003

20 19 9 -1.501708e+003 -1.719615e+003 -1.455199e+003

30 29 7 -1.675404e+003 -1.676152e+003 -1.476634e+003

40 37 5 -1.674735e+003 -1.675404e+003 -1.476634e+003

50 45 8 -1.634495e+003 -1.675043e+003 -1.476634e+003

60 53 9 -1.573442e+003 -1.661265e+003 -1.476634e+003

70 61 -1.475159e+003 pr -1.655936e+003 -1.479077e+003

80 65 5 -1.627233e+003 -1.633401e+003 -1.604271e+003

90 61 -1.545101e+003 pr -1.628105e+003 -1.607919e+003

100 59 -1.622607e+003 pr -1.623803e+003 -1.622774e+003

EXIT: Optimal solution found.

Final Statistics for MIP

------------------------

Final objective value = -1.62301377805539e+003

Final integrality gap (abs / rel) =-1.04e-006 / -6.42e-010 (-0.00)

# of nodes processed = 105

# of subproblems processed = 105

Total program time (secs) = 396.269 ( 397.865 CPU time)

Time spent in evaluations (secs) = 396.633

===========================================================================

>> x

x =

0 0 0 9 0 9 0 0 0 1 0 1 9 119 -3

**O6= 2500**

Node Left Iinf Objective Best Relaxatn Best Incumbent

------ ------ ------ -------------- -------------- --------------

1 0 11 -1.771139e+003 -1.771139e+003 1.315714e+005

10 9 8 -1.628105e+003 -1.730305e+003 -1.312362e+003

20 19 8 -1.485003e+003 -1.687701e+003 -1.429729e+003

30 29 8 -1.625120e+003 -1.625288e+003 -1.525588e+003

40 31 -1.525124e+003 pr -1.611626e+003 -1.525588e+003

50 33 7 -1.608818e+003 -1.610142e+003 -1.525588e+003

60 35 8 -1.568618e+003 -1.574906e+003 -1.525588e+003

70 37 4 -1.568054e+003 -1.568567e+003 -1.548745e+003

80 39 4 -1.558740e+003 -1.567346e+003 -1.548800e+003

90 37 INFEASIBLE pr -1.565064e+003 -1.548800e+003

100 35 -1.557189e+003 pr -1.558746e+003 -1.557488e+003

EXIT: Optimal solution found.

Final Statistics for MIP

------------------------

Final objective value = -1.55748803711028e+003

Final integrality gap (abs / rel) =-1.20e-007 / -7.70e-011 (-0.00)

# of nodes processed = 109

# of subproblems processed = 109

Total program time (secs) = 434.238 ( 434.884 CPU time)

Time spent in evaluations (secs) = 434.228

===========================================================================

>> x

x =

0 0 0 10 0 10 0 0 0 1 0 1 8 120 -3

**O6=3000**

X=

7 0 0 11 0 0 1 0 0 1 0 0 3 121 -3

**O6=1500**

Node Left Iinf Objective Best Relaxatn Best Incumbent

------ ------ ------ -------------- -------------- --------------

1 0 11 -1.835665e+003 -1.835665e+003 1.300714e+005

10 9 11 -1.756359e+003 -1.834205e+003 -1.431704e+003

20 19 8 -1.628348e+003 -1.789643e+003 -1.431704e+003

30 29 -1.501619e+003 pr -1.755044e+003 -1.526595e+003

40 31 7 -1.728825e+003 -1.729030e+003 -1.526595e+003

50 41 INFEASIBLE pr -1.728340e+003 -1.526595e+003

60 49 10 -1.622516e+003 -1.711950e+003 -1.526595e+003

70 59 INFEASIBLE pr -1.705838e+003 -1.527528e+003

80 65 4 -1.693241e+003 -1.697312e+003 -1.674261e+003

\* 80 65 r -1.683362e+003

90 69 6 -1.689976e+003 -1.693241e+003 -1.683362e+003

100 75 -1.693021e+003 pr -1.693107e+003 -1.693047e+003

EXIT: Optimal solution found.

Final Statistics for MIP

------------------------

Final objective value = -1.69304664920182e+003

Final integrality gap (abs / rel) =-2.17e-006 / -1.28e-009 (-0.00)

# of nodes processed = 105

# of subproblems processed = 105

Total program time (secs) = 368.165 ( 368.740 CPU time)

Time spent in evaluations (secs) = 369.378

===========================================================================

>> x

x =

0 0 0 9 0 9 0 0 0 1 0 1 9 118 -2

**O6=3500**

Node Left Iinf Objective Best Relaxatn Best Incumbent

------ ------ ------ -------------- -------------- --------------

1 0 11 -1.713366e+003 -1.713366e+003 1.330714e+005

10 9 7 -1.545336e+003 -1.628313e+003 -1.257547e+003

20 15 -1.480478e+003 pr -1.545376e+003 -1.520219e+003

30 13 8 -1.534238e+003 -1.535299e+003 -1.524458e+003

40 13 -1.414434e+003 pr -1.533935e+003 -1.524895e+003

50 11 -1.526164e+003 pr -1.529128e+003 -1.528328e+003

60 11 8 -1.528888e+003 -1.528889e+003 -1.528818e+003

EXIT: Optimal solution found.

Final Statistics for MIP

------------------------

Final objective value = -1.52881769235806e+003

Final integrality gap (abs / rel) =-9.93e-008 / -6.50e-011 (-0.00)

# of nodes processed = 63

# of subproblems processed = 63

Total program time (secs) = 477.791 ( 480.202 CPU time)

Time spent in evaluations (secs) = 484.813

===========================================================================

>> x

x =

7 0 0 11 0 0 1 0 0 1 0 0 3 121 -3