

MODEL:

SETS:
PRODUKT/1..3/: x,gewinn;
YBIN/1..4/: y;
ENDSETS

MAX = @SUM(PRODUKT(i): gewinn(i) * x(i));

x(1) <= 8;
x(2) <= 7;
x(1) - 1000 * y(1) <= 0;
x(2) - 1000 * y(2) <= 0;
x(3) - 1000 * y(3) <= 0;
5*x(1) + 4*x(2) + 2*x(3) - 1000*y(4) <= 45;
4*x(1) + 6*x(2) + 3*x(3) + 1000*y(4) <= 1050;
y(1) + y(2) + y(3) <= 2;
@FOR(YBIN(i): @BIN(y(i)));
@FOR(PRODUKT(i): @GIN(x(i)));

DATA:
gewinn = 4, 5, 2;
ENDDATA

END

MODEL:

MAX= 4 * X_1 + 5 * X_2 + 2 * X_3 ;

X_1 <= 8 ;

X_2 <= 7 ;

- 1000 * Y_1 + X_1 <= 0 ;

- 1000 * Y_2 + X_2 <= 0 ;

- 1000 * Y_3 + X_3 <= 0 ;

- 1000 * Y_4 + 5 * X_1 + 4 * X_2 + 2 * X_3 <= 45 ;

1000 * Y_4 + 4 * X_1 + 6 * X_2 + 3 * X_3 <= 1050 ;

Y_1 + Y_2 + Y_3 <= 2 ;

@BIN(Y_1); @BIN(Y_2); @BIN(Y_3); @BIN(Y_4); @GIN(X_1);

@GIN(X_2); @GIN(X_3);

END

Global optimal solution found at iteration:
Objective value:

68
51.00000

Variable	Value	Reduced Cost
X(1)	0.000000	-4.000000
X(2)	7.000000	-5.000000
X(3)	8.000000	-2.000000
GEWINN(1)	4.000000	0.000000
GEWINN(2)	5.000000	0.000000
GEWINN(3)	2.000000	0.000000
Y(1)	0.000000	0.000000
Y(2)	1.000000	0.000000
Y(3)	1.000000	0.000000
Y(4)	0.000000	0.000000

Row	Slack or Surplus	Dual Price
1	51.00000	1.000000
2	8.000000	0.000000
3	0.000000	0.000000
4	0.000000	0.000000
5	993.0000	0.000000
6	992.0000	0.000000
7	1.000000	0.000000
8	984.0000	0.000000
9	0.000000	0.000000