第二问污染层次分析

Min 1.0872x1+1.7727x2+1.3555x3

s.t.

x1+x2+x3=100

x1,x2,x3>0

x3-x1>10

x3-x1<30

x2>5

x2<15

0.7272x1+0.7727x2+x3<87

第二问污染层次分析的灵敏度分析

LP OPTIMUM FOUND AT STEP 2

OBJECTIVE FUNCTION VALUE

1) 127.8679

VARIABLE VALUE REDUCED COST

X1 41.017609 0.000000

X2 7.964785 0.000000

X3 51.017609 0.000000

X1,X2,X3 0.000000 0.000000

ROW SLACK OR SURPLUS DUAL PRICES

2) 0.000000 -6.459479

3) 0.000000 0.000000

4) 0.000000 -0.961478

5) 20.000000 0.000000

6) 2.964785 0.000000

7) 7.035215 0.000000

8) 0.000000 6.065458

NO. ITERATIONS= 2

RANGES IN WHICH THE BASIS IS UNCHANGED:

OBJ COEFFICIENT RANGES

VARIABLE CURRENT ALLOWABLE ALLOWABLE

COEF INCREASE DECREASE

X1 1.087200 0.769013 INFINITY

X2 1.772700 INFINITY 0.551350

X3 1.355500 1.102700 INFINITY

X1,X2,X3 0.000000 INFINITY 0.000000

RIGHTHAND SIDE RANGES

ROW CURRENT ALLOWABLE ALLOWABLE

RHS INCREASE DECREASE

2 100.000000 0.740506 0.312064

3 0.000000 0.000000 INFINITY

4 10.000000 4.688423 1.975798

5 30.000000 INFINITY 20.000000

6 5.000000 2.964785 INFINITY

7 15.000000 INFINITY 7.035215

8 87.000000 0.269499 0.639501