

Prepared data for the revised simplex

<http://web.tecnico.ulisboa.pt/~mcasquilho/compute/or/Fx-LP-revised.php>

1) Resnick, fertilizer: $z^* = 342\ 857.1$

Opt	Max
C^T	20 30 0 0 0
$A \mid b$	0.10 0.075 1 0 0 1500 0.08 0.1 0 1 0 1200 0.05 0.15 0 0 1 1500
Artificial	0
Big M	1+3
Initial basis	3 4 5

2) Sultan, diet: $z^* = 1.3$

Opt	Min
C^T	0.6 0.4 0 0 0 0 0 0
$A \mid b$	20 30 -1 0 0 1 0 0 60 12 6 0 -1 0 0 1 0 24 30 15 0 0 -1 0 0 1 30
Artificial	6 7 8
Big M	1+3
Initial basis	6 7 8

3) Sultan, cars: $z^* = 42\ 000$

Opt	Max
C^T	400 300 0 0 0 0 0 0
$A \mid b$	4 6 1 0 0 0 0 0 720 6 3 0 1 0 0 0 0 480 1 0 0 0 -1 0 +1 0 20 0 1 0 0 0 -1 0 +1 30
Artificial	7 8
Big M	1+3
Initial basis	3 4 7 8

4) Sultan, transport (18 vars.): $z^* = 1\ 930$

Opt	Min
C^T	22 36 24 23 31 19 32 26 25 25 16 22 0 0 0 0 0 0
$A \mid b$	1 1 1 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 20 0 0 0 0 1 1 1 1 0 0 0 0 0 1 0 0 0 0 30 0 0 0 0 0 0 0 0 1 1 1 1 0 0 1 0 0 0 50 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 1 0 0 20 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 1 0 30 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 1 30
Artificial	13 14 15 16 17 18
Big M	1+3
Initial basis	13 14 15 16 17 18

5) Zions: $z^* = 71.4$

Opt	Max
C^T	0.56 0.42 0 0 0
$A \mid b$	1 2 1 0 0 240 1.5 1 0 1 0 180 1 0 0 0 1 110
Artificial	0
Big M	1+3
Initial basis	3 4 5

6) Wyndor: $z^* = 36$

Opt	Max
C^T	3 5 0 0 0
A b	1 0 1 0 0 4 0 2 0 1 0 12 3 2 0 0 1 18
Artificial	0
Big M	1+3
Initial basis	3 4 5

7) ZionsPlus (impossible): $z^* = -19\ 932$

Opt	Max
C^T	0.56 0.42 0 0 0 0 0
A b	1 2 1 0 0 0 0 240 1.5 1 0 1 0 0 0 180 1 0 0 0 1 0 0 110 1 0 0 0 0 -1 1 130
Artificial	7
Big M	1+3
Initial basis	3 4 5 7

8) SAS/OR Example 7.1 Diet Problem (16 vars.): $z^* = 12,0813$

Opt	Min
C^T	2 3.5 8 1.5 11 1 0 0 +0 0 +0 0 +0 0 0 +0
A b	4 8 7 1.3 8 9.2 1 0 0 0 0 0 0 0 0 +10 1 5 9 0.1 7 1 0 -1 1 0 0 0 0 0 0 +8 15 11.7 .4 22.6 0 17 0 0 0 -1 1 0 0 0 0 +10 90 120 106 97 130 180 0 0 0 0 0 -1 1 0 0 0 300 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 +1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 -1 1 +0.5
Artificial	9 11 13 16
Big M	1+3
Init. bas.	7 9 11 13 14 16

