

1. Maximize $p = 2x + 2y$ subject to
 $1x + 1y \leq 6$
 $-1x + 2y \leq 6$
 $1y \geq 1$

Tableau #1

x	y	s1	s2	s3	p
1	1	1	0	0	6
-1	2	0	1	0	6
0	1	0	0	-1	1
-2	-2	0	0	0	1

Tableau #2

x	y	s1	s2	s3	p
1	0	1	0	1	5
-1	0	0	1	2	4
0	1	0	0	-1	1
-2	0	0	0	-2	1

Tableau #3

x	y	s1	s2	s3	p
1	0	1	0	1	5
0	0	1	1	3	9
0	1	0	0	-1	1
0	0	2	0	0	12

2. Maximize $p = -2x + 1y$ subject to
 $1x + 1y \leq 6$
 $-1x + 2y \leq 6$
 $1y \geq 1$

Tableau #1

x	y	s1	s2	s3	p
1	1	1	0	0	6
-1	2	0	1	0	6
0	1	0	0	-1	1
2	-1	0	0	0	1

Tableau #2

x	y	s1	s2	s3	p
1	0	1	0	1	5
-1	0	0	1	2	4
0	1	0	0	-1	1
2	0	0	0	-1	1

Tableau #3

x	y	s1	s2	s3	p
1.5	0	1	-0.5	0	3
-0.5	0	0	0.5	1	2
-0.5	1	0	0.5	0	3
1.5	0	0	0.5	0	1

3. Maximize $p = 2x + 2y$ subject to
 $1x + 1y \leq 6$
 $-1x + 2y \geq 6$
 $1y \leq 1$

Tableau #1

x	y	s1	s2	s3	p
1	1	1	0	0	6
-1	2	0	-1	0	6
0	1	0	0	1	1
-2	-2	0	0	0	1

Tableau #2

x	y	s1	s2	s3	p
1	0	1	0	-1	5
-1	0	0	-1	-2	4
0	1	0	0	1	1
-2	0	0	0	2	1

4. Maximize $p = 2x + 2y$ subject to
 $1x + 1y \geq 6$
 $-1x + 2y \geq 6$
 $1y \geq 1$

Tableau #1

x	y	s1	s2	s3	p
1	1	-1	0	0	6
-1	2	0	-1	0	6
0	1	0	0	-1	1
-2	-2	0	0	0	1

Tableau #2

x	y	s1	s2	s3	p
1	1	-1	0	0	6
0	3	-1	-1	0	12
0	1	0	0	-1	1
0	0	-2	0	0	12

Tableau #3

x	y	s1	s2	s3	p
1	0	-1	0	1	5
0	0	-1	-1	3	9
0	1	0	0	-1	1
0	0	-2	0	0	12

Tableau #4

x	y	s1	s2	s3	p	
1	0	-0.667	0.333	0	0	2
0	0	-0.333	-0.333	1	0	3
0	1	-0.333	-0.333	0	0	4
0	0	-2	0	0	1	12