

HW3

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1.

初始单纯形表

2	3	6	0	0	0	1
1	2	3	1	0	0	10
1	0	-1	0	1	0	3
0	-1	2	0	0	1	5

更新单纯形表

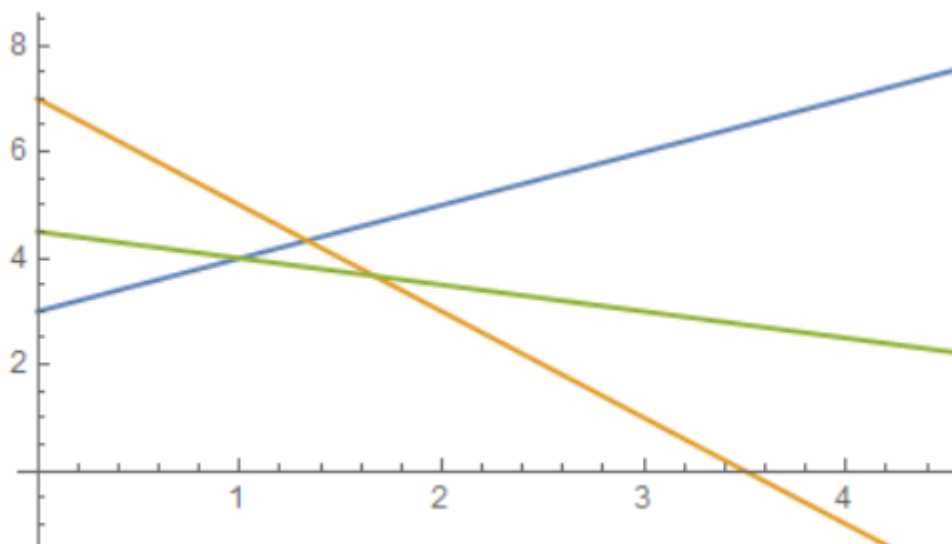
2	6	0	0	0	3	-14
1	3.5	0	1	0	-1.5	2.5
1	-0.5	0	0	1	0.5	5.5
0	-0.5	1	0	0	0.5	2.5

2	6	0	0	0	3	-14
$2/7$	1	0	$2/7$	0	$-3/7$	$5/7$
$8/7$	0	0	$1/7$	1	$2/7$	$41/7$
$1/7$	0	1	$1/7$	0	$2/7$	$20/7$

0	-1	0	-2	0	0	-19
1	3.5	0	1	0	-1.5	2.5
0	-4	0	-1	1	2	3
0	-0.5	1	0	0	0.5	2.5

$$x_1 = 2.5 \quad x_2 = 0 \quad x_3 = 2.5 \quad \max = 19$$

2.



如图所示，可以选 $x = 0, y = 7$

1.

$$(p \wedge q \wedge r) \vee (\neg p \wedge q \wedge r) \vee (\neg p \wedge \neg q \wedge r)$$

2.

1. \top, s is marked return satisfiable
2. $\top, p5, p11, \perp$ is marked return unsatisfiable
3. \top, q, s is marked return satisfiable