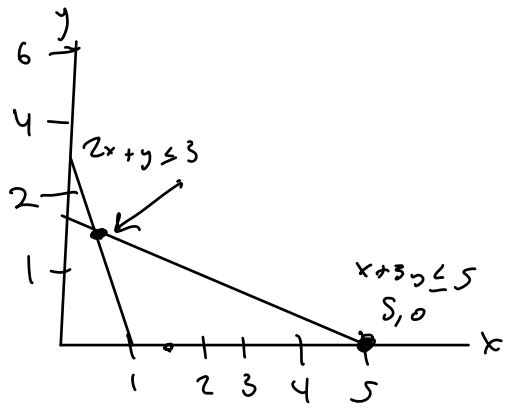
7.11

$$\min\ 3a + 5b$$

$$2a + b \geq 1$$

$$a + 3b \geq 1$$

$$a, b \geq 0$$



$= \left(\frac{4}{5}, \frac{7}{5}\right)$

	x	y	x+y
A	0	6	0
B	0	5/3	5/3
C	4/5	1.4	2.2
D	1.5	0	1.5

← Optimal solution is **2.2**

7.13

a. for "R"

	H	T
H	+1	-1
T	-1	+1

b. $x = (x1, x2)$ row

$x1 - x2$ or $-x1 + x2$ Column

$$z \leq x1 - x2$$

$$z \leq -x1 + x2$$

$$x1 + x2 = 1$$

→

$$x1 + x2 = 1$$

$$x1 - x2 = 0$$

$x1, x2 \geq 0$

$2x1 = 1$

$x1 = 1/2,$

$x2 = 1/2,$

$x1 - x2 = 0$

Optimal Value is 0