→ rhs would be -ve (?)

Dual-Simplex method : (* on Final exam)

Nov. 8TH/17

Linear Prog.

Max	z	x_1	x_2	x_3	...	
	1	$-C_1$	$-C_2$	$-C_3$	...	← most (-ve)
		a_{11}	a_{12}	a_{13}	...	$b_1 = x_{BV_1}$
		a_{21}	a_{22}	a_{23}	...	$b_2 = x_{BV_2}$
		a_{31}	a_{32}	a_{33}	...	$b_3 = x_{BV_3}$

$j_0 = 1$, $i_0 = 2$

$$\theta = \min_i \left\{ \frac{b_1}{a_{11}}, \frac{b_2}{a_{12}}, \frac{b_3}{a_{13}}, \dots a_{i1} > 0 \right\} = \frac{b_{i0}}{a_{i0j0}} = \frac{b_{i0}}{a_{i01}}$$

$x_1 \rightarrow$ BV

$x_{BV_2} \rightarrow$ NBV

$$\text{Max } z = cx \qquad \text{Min } w = y^T b$$

$$Ax = b \iff A^T y = c$$

$$x \geq 0 \qquad y \geq 0$$

$$\text{Max } z = 60x_1 + 30x_2 + 20x_3$$

$$\text{s.t.} \quad 8x_1 + 6x_2 + x_3 \leq 48$$

$$4x_1 + 2x_2 + 1.5x_3 \leq 20$$

$$2x_1 + 1.5x_2 + 0.5x_3 \leq 8$$

$$x_1, x_2, x_3 \geq 0$$