Simplex

① $X_1 + X_2 \geqslant 3$

$X_1 + X_2 - X_3 + \bar{X}_4 = 3 \implies$ Two phase method

② $X_1 + X_2 \leq -3$ ← b muse $\geqslant 0$

$-X_1 - X_2 \geqslant 3$

$-X_1 - X_2 - X_3 + \tilde{X}_4 = 3 \implies$ Two phase

③ $X_1 \in R$ ← 无约束

$X_1 = X_2 - X_3$,

$X_2, X_3 \geqslant 0$

④ min matrix

X^T

$X_0 \qquad A \qquad B$

$C^T - C_0^T A \qquad - C_0^T B$

max matrix

$$X^T$$

$$X_0 \qquad A \qquad B$$

$$-C^T + C_0^T A \qquad C_0^T B$$
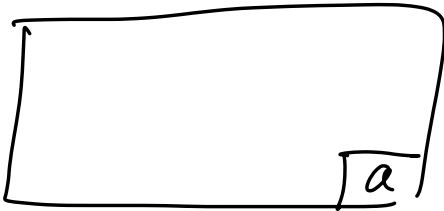
⑤ final value

$$Z_{min} = -a$$

$$Z_{max} = a$$