

①

| | | | | |
|---|-----|-------|---|-----|
| | 10 | 4 | 2 | |
| 7 | → 1 | | | 8 |
| | 2 | ↓ 3 | 4 | 6 |
| | | 5 → 1 | | |
| | 2 | | 3 | ↓ 1 |
| | | | 5 | 5 |
| 7 | 6 | 6 | | |

②

$V_1=10 \quad V_2=4 \quad V_3=5$

| | | | | |
|----------|------------|------------|---|---|
| | 10 | 4 | 2 | |
| $u_1=0$ | $7-\theta$ | $1+\theta$ | | 8 |
| | 2 | 3 | 4 | 6 |
| $u_2=-1$ | θ | $5-\theta$ | 1 | |
| | 2 | 3 | 1 | 5 |
| $u_3=-4$ | | | 5 | |
| | 7 | 6 | 6 | |

其中 $\begin{cases} 7-\theta \geq 0 \\ 5-\theta \geq 0 \\ \theta \geq 0 \end{cases}$

$V_1=3 \quad V_2=4 \quad V_3=2$

| | | | | |
|----------|------|---|------|---|
| | 10 | 4 | 2 | |
| $u_1=0$ | -7 | 6 | 2 | 8 |
| | 2 | 3 | 4 | 6 |
| $u_2=-1$ | 6 | | -3 | |
| | 2 | 3 | 1 | 5 |
| $u_3=-1$ | 1 | | 4 | |
| | 7 | 6 | 6 | |

$x_{12}=6 \quad x_{13}=2 \quad x_{21}=6 \quad x_{31}=1 \quad x_{33}=4$

$\therefore \min z = 46$

$V_1=10 \quad V_2=4 \quad V_3=12$

| | | | | | |
|-----------|------------|------------|------------|---|---|
| | 10 | 6 | 4 | 2 | |
| $u_1=0$ | $2-\theta$ | $1+\theta$ | θ | | 8 |
| | 2 | 3 | 4 | 6 | |
| $u_2=-8$ | $5+\theta$ | | $1-\theta$ | | |
| | 2 | 3 | 1 | 5 | |
| $u_3=-11$ | | | 5 | | |
| | 7 | 6 | 6 | | |

其中 $\begin{cases} 2-\theta \geq 0 \\ 1-\theta \geq 0 \\ \theta \geq 0 \end{cases}$

$V_1=10 \quad V_2=4 \quad V_3=2$

| | | | | | |
|----------|------------|---|------------|---|---|
| | 10 | 6 | 4 | 2 | |
| $u_1=0$ | $1-\theta$ | | $1+\theta$ | | 8 |
| | 2 | 3 | 4 | 6 | |
| $u_2=-8$ | 6 | | | | |
| | 2 | 3 | 1 | 5 | |
| $u_3=-1$ | θ | | $5-\theta$ | | |
| | 7 | 6 | 6 | | |

其中 $\begin{cases} 1-\theta \geq 0 \\ 5-\theta \geq 0 \\ \theta \geq 0 \end{cases}$