

$$\max 8a + 6b - 10y_A - 8y_B$$

$$2a + b \leq 12, \quad a + b \leq 10$$

$$a \leq 6y_A, \quad b \leq 8y_B$$

$$a, b \geq 0, \quad y_A, y_B \in \{0, 1\}$$