

Exercice 1

$$x \neq 4 \quad \textcircled{1}$$

$$x \neq y \quad \textcircled{2}$$

$$x = y + 2 \quad \textcircled{3}$$

$$D(x) = [0..5]$$

$$D(y) = [0..5]$$

Borne consistante:

On considère la contrainte $\textcircled{3}$

$$x = y + 2 \quad \text{donc} \quad \max(x) \leq \max(y) + 2 = 7$$

$$\min(x) \geq \min(y) + 2 = 2$$

$$\text{et} \quad \max(y) \leq \max(x) - 2 = 3$$

$$\min(y) \geq \min(x) - 2 = -2$$

$$\text{D'où } D(x) = [2..5]$$

$$\text{et } D(y) = [0..3]$$

Ces domaines ne changent plus en appliquant la borne consistante avec contraintes $\textcircled{1} - \textcircled{2} - \textcircled{3}$

Noeud consistante:

$$D(x) = \{0, 1, 2, 3, 5\}$$

$$D(y) = \{0, 1, 2, 3, 4, 5\}$$

Noeud + arc consistante

$$D(x) = \{2, 3, 5\}$$

$$D(y) = \{0, 1, 3\}$$