

1. Exercice 1

☞ Simplifier les équations suivantes en utilisant les règles de l'algèbre de Boole.

$$a + a \cdot b =$$

$$\bar{a} \cdot \bar{b} \cdot c + \bar{a} \cdot b \cdot c =$$

$$\overline{a \cdot b + a \cdot \bar{b}} =$$

$$a \cdot \bar{b} \cdot c + a \cdot b + a \cdot c =$$

2. Exercice 2

☞ Extraire l'équation logique de la table de vérité.

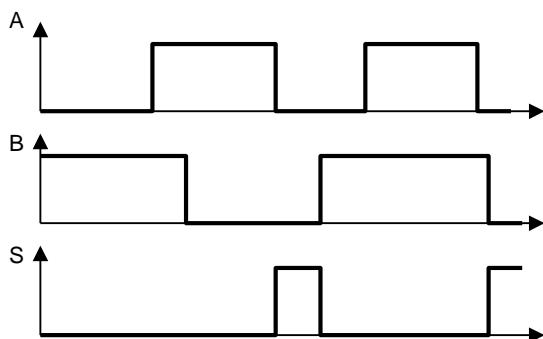
a	b	c	s
0	0	0	1
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1

3. Exercice 3

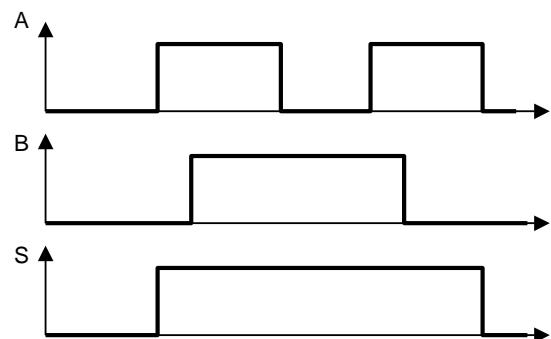
↗ Tracer le logigramme de $S = \bar{a} + b \cdot c \cdot d$.

4. Exercice 4

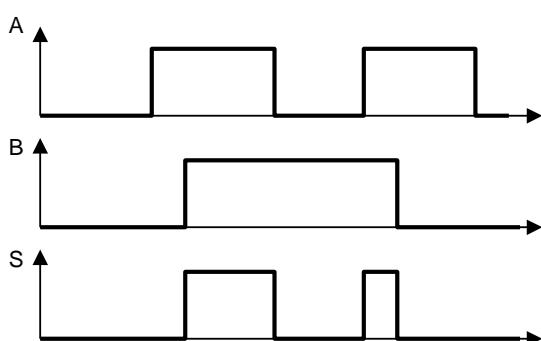
↗ Trouver la relation entre la sortie S et les entrées A et B



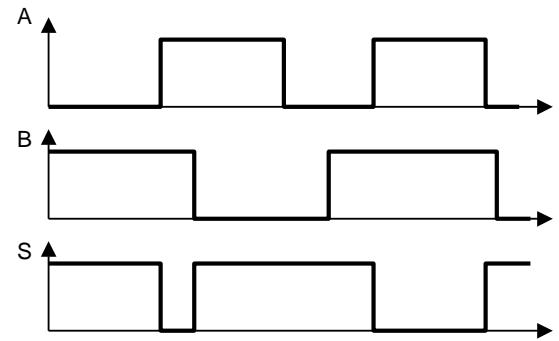
$$S =$$



$$S =$$



$$S =$$



$$S =$$