**Comprovação das propriedades: Identidades auxiliares.**

|  |  |  |
| --- | --- | --- |
| **I****dentidades auxiliares** | ***15*** | A+A.B=A |
| ***16*** |  |
| ***17*** | (A+B).(A+C)=A+B.C |

**Identidades auxiliares 15** A+A.B=A

a) Preenche as tabelas de verdade

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **15** A+A.B=A | | | | | | 22=4 | Entradas | |  | | | **A** | **B** | **A+B** | **A+A.B** | | 0 | 0 | 0 |  |  | | 1 | 0 | 1 |  |  | | 2 | 1 | 0 |  |  | | 3 | 1 | 1 |  |  | |  |  |

**Identidades auxiliares 16**

1. Preenche as tabelas de verdade

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **16** | | | | | |  |  |
| 23=8 | Entradas | |  | |  |  |  |
| **A** | **B** |  |  |  |  |  |
| 0 | 0 | 0 |  |  |  |  |  |
| 1 | 0 | 1 |  |  |  |  |  |
| 2 | 1 | 0 |  |  |  |  |  |
| 3 | 1 | 1 |  |  |  |  |  |
| 4 | 0 | 0 |  |  |  |  |  |
| 5 | 0 | 1 |  |  |  |  |  |
| 6 | 1 | 0 |  |  |  |  |  |
| 7 | 1 | 1 |  |  |  |  |  |

b) Desenha e testa os circuitos no logisim.

**Identidades auxiliares 17 (A+B).(A+C)=A+B.C**

1. Preenche as tabelas de verdade

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **17 (A+B).(A+C)=A+B.C** | | | | | |  | **A+B.C** | |
| 23=8 | Entradas | |  | |  |  |
| **A** | **B** | **A+B** | **A+C** | **(A+B).(A+C)** |  | **B.C** | **A+B.C** |
| 0 | 0 | 0 |  |  |  |  |  |  |
| 1 | 0 | 1 |  |  |  |  |  |  |
| 2 | 1 | 0 |  |  |  |  |  |  |
| 3 | 1 | 1 |  |  |  |  |  |  |
| 4 | 0 | 0 |  |  |  |  |  |  |
| 5 | 0 | 1 |  |  |  |  |  |  |
| 6 | 1 | 0 |  |  |  |  |  |  |
| 7 | 1 | 1 |  |  |  |  |  |  |

b) Desenha e testa os circuitos no logisim.