**Von der Wahrheitstabelle/Gleichung zur Schaltung**

1. Zeichnen Sie die Schaltungen zu den nachfolgenden Wahrheitstabellen/Gleichungen auf:

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | X | \_\_ \_\_ \_\_  A ^ B v A ^ B |
| 0 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 0 | 0 |
| 1 | 1 | 0 |

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | X | \_\_\_ \_\_\_ \_\_\_ \_\_\_  A ^ B v A ^ B v A ^ B |
| 0 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | X | \_\_ \_\_ \_\_ \_\_  A ^ B ^ C v A ^ B ^ C v A ^ B ^ C |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 0 |
| 0 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 0 |

* 1. \_\_ \_\_ \_\_ \_\_ \_\_ \_\_  
     Z = Q1 ^ Q2 ^ Q3 v Q1 ^ Q2 ^ Q3 v Q1 ^ Q2 ^ Q3 (d) freiwillig)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Q1 | Q2 | Q3 | Z | \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ Z = Q1 ^ Q2 ^ Q3 v Q1 ^ Q2 ^ Q3 v Q1 ^ Q2 ^ Q3 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 |
| 0 | 1 | 1 | 0 |
| 1 | 0 | 0 | 1 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 0 | 0 |
| 1 | 1 | 1 | 0 |