Tabela Verdade:

| **A** | **B** | **C** | **D** | ***a*** | ***b*** | ***c*** | ***d*** | ***e*** | ***f*** | ***g*** | ***sin*** | **C-2** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | **0** |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | **1** |
| 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | **2** |
| 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | **3** |
| 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | **4** |
| 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | **5** |
| 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | **6** |
| 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | **7** |
| 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | **-8** |
| 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | **-7** |
| 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | **-6** |
| 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | **-5** |
| 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | **-4** |
| 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | **-3** |
| 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | **-2** |
| 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | **-1** |

A)

00 01 11 10

| 1 |  |  | 1 |
| --- | --- | --- | --- |
|  | 1 |  | 1 |
|  | 1 |  | 1 |
| 1 | 1 | 1 | 1 |

~A.C + ~B.~D + C.~D + A.~B + B.~C.D

B)

00 01 11 10

| 1 |  |  |  |
| --- | --- | --- | --- |
| 1 | 1 | 1 |  |
| 1 |  |  |  |
| 1 |  | 1 | 1 |

~C.~D + ~A.B.~C + ~A.B.~D + A.~B.C

C)

00 01 11 10

| 1 |  |  | 1 |
| --- | --- | --- | --- |
|  |  |  | 1 |
|  |  |  | 1 |
| 1 |  |  | 1 |

C.~D + ~B.~D

D)

00 01 11 10

| 1 |  | 1 | 1 |
| --- | --- | --- | --- |
|  | 1 |  | 1 |
|  | 1 |  | 1 |
| 1 |  | 1 | 1 |

C.~D + ~B.~D + ~B.C + B.~C.D

E)

00 01 11 10

| 1 | 1 | 1 |  |
| --- | --- | --- | --- |
| 1 | 1 | 1 | 1 |
| 1 | 1 | 1 |  |
| 1 | 1 | 1 | 1 |

~C + D + ~A.B + A.~B

F)

00 01 11 10

| 1 | 1 | 1 | 1 |
| --- | --- | --- | --- |
| 1 |  | 1 |  |
| 1 | 1 | 1 | 1 |
| 1 | 1 |  |  |

~C.~D + A.~C + A.B + ~A.~B + ~A.C.D

G)

00 01 11 10

| 0 | 0 | 1 | 1 |
| --- | --- | --- | --- |
| 1 | 1 | 0 | 1 |
| 1 | 1 | 0 | 1 |
| 1 | 0 | 1 | 1 |

C.~D + ~B.C + B.~C + A.~D

SIN)

00 01 11 10

| 0 | 0 | 1 | 1 |
| --- | --- | --- | --- |
| 1 | 1 | 0 | 1 |
| 1 | 1 | 0 | 1 |
| 1 | 0 | 1 | 1 |

C.~D + ~B.C + B.~C + A.~D