

Mapas de Karnaugh

① Simplifique as seguintes equações usando mapas K:

1. $f(A, B, C) = \sum m(0, 2, 3)$
2. $f(A, B, C) = \sum m(1, 2, 4, 6, 7)$
3. $f(A, B, C) = \sum m(0, 1, 2, 3)$
4. $f(A, B, C) = \sum m(0, 2, 4, 6)$
5. $f(A, B, C) = \sum m(0, 3, 5, 6)$
6. $f(A, B, C, D) = \overline{A}\overline{B}C + AD + B\overline{D} + C\overline{D} + A\overline{C} + \overline{A}\overline{B}$
7. $f(A, B, C, D) = (A + B + \overline{C})(\overline{B} + \overline{D})(\overline{A} + C)(B + C)$
8. $f(A, B, C, D) = \prod M(0, 5, 7, 13, 14, 15)$
9. $f(A, B, C, D) = \prod M(1, 4, 6, 8, 11, 13, 14)$
10. $f(A, B, C, D) = \prod M(1, 2, 4, 5, 7, 8, 10, 11, 13, 14)$
11. $f(A, B, C, D) = \prod M(0, 5, 7, 8, 9, 10, 11, 13)$
12. $f(A, B, C, D) = \sum m(0, 1, 4, 5, 9, 11, 14, 15) + d(10, 13)$
13. $f(A, B, C, D) = \sum m(0, 13, 14, 15) + d(1, 2, 3, 9, 10, 11)$
14. $f(A, B, C, D) = \sum m(0, 6, 9, 10, 13) + d(1, 3, 8)$
15. $f(A, B, C, D) = \sum m(1, 4, 7, 10, 13) + d(5, 14, 15)$
16. $f(A, B, C, D, E) = \sum m(0, 4, 8, 12, 16, 20, 24, 28)$
17. $f(A, B, C, D, E) = \sum m(0, 2, 5, 8, 13, 15, 18, 21, 24, 29, 31)$
18. $f(A, B, C, D, E) = \sum m(3, 4, 6, 9, 11, 13, 15, 18, 25, 26, 27, 29, 31)$
19. $f(A, B, C, D, E) = \sum m(1, 5, 8, 10, 12, 13, 14, 15, 17, 21, 24, 26, 31)$
20. $f(A, B, C, D, E) = A + BC + \overline{C}D\overline{E}$
21. $f(A, B, C, D, E) = (A + B)(B + C)(C + \overline{D})(D + \overline{E})$
22. $f(A, B, C, D, E) = \sum m(1, 4, 6, 10, 20, 22, 24, 26) + d(0, 11, 16, 17)$
23. $f(A, B, C, D, E, F) = \prod M(2, 3, 6, 7, 10, 14, 18, 19, 22, 23, 27, 37, 42, 43, 45, 46)$
24. $f(A, B, C, D, E, F) = \prod M(6, 9, 13, 18, 19, 25, 27, 29, 41, 45, 57, 61)$
25. $f(A, B, C, D, E, F) = \prod M(4, 5, 6, 7, 8, 18, 20, 23, 25, 26, 27, 28, 37, 38, 42, 44)$