-Министерство науки и высшего образования Российской Федерации

Федеральное государственное автономное образовательное учреждение высшего образования

«Национальный исследовательский университет ИТМО»

*Факультет программной инженерии и компьютерной техники*

**Курсовая работа**

по дисциплине

«Дискретная математика»

Вариант №87

Выполнил:

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Преподаватель:

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г. Санкт-Петербург

2022г.

# Оглавление

[**Оглавление**](#_7c4xf1yrz0jn) **2**

[**Часть 2**](#_kf44nk92n0tg) **3**

# Часть 2

Вариант 87

| N | Выполняемые операции | Число переменных | | Разрядность операндов | | Знаки | Доп.код | Фиксация переноса/заема/переполнения | Для деления формирование | | Запрещенная нулевая комбинация | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Входных | Выходных | A | B | Частного | Остатка | A | B |
| 87 |  | 5 | 4 | 2 | 3 | - | - | - | - | - | - | - |

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

:

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | 0 | 0 | 0 |
| 01 | **1** | **1** | 0 | **1** |
| 11 | **1** | **1** | 0 | 0 |
| 10 | 0 | 0 | **1** | 0 |

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | 0 | **1** | **1** |
| 01 | **1** | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 |
| 10 | 0 | **1** | **1** | **1** |

:

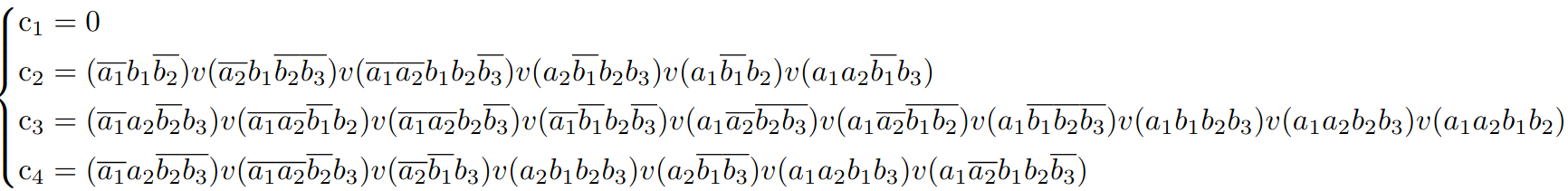
|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | 0 | **1** | **1** |
| 01 | 0 | 0 | 0 | **1** |
| 11 | 0 | **1** | 0 | 0 |
| 10 | 0 | **1** | 0 | **1** |

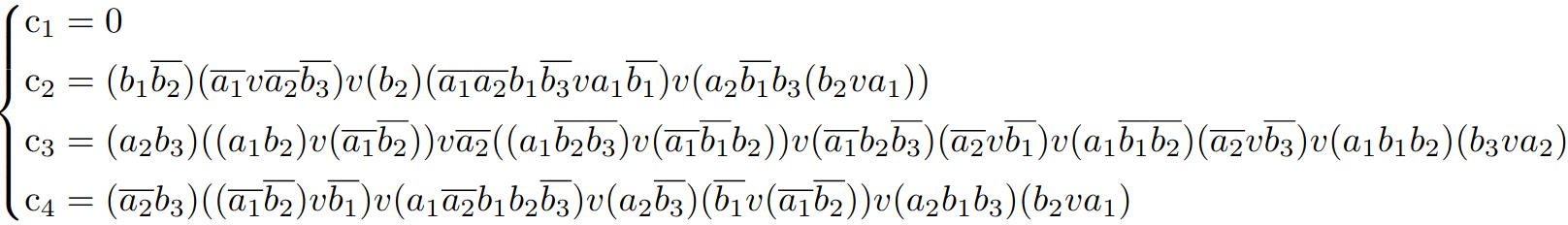
|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | **1** | **1** | 0 | 0 |
| 01 | **1** | 0 | **1** | 0 |
| 11 | 0 | 0 | **1** | **1** |
| 10 | **1** | 0 | **1** | 0 |

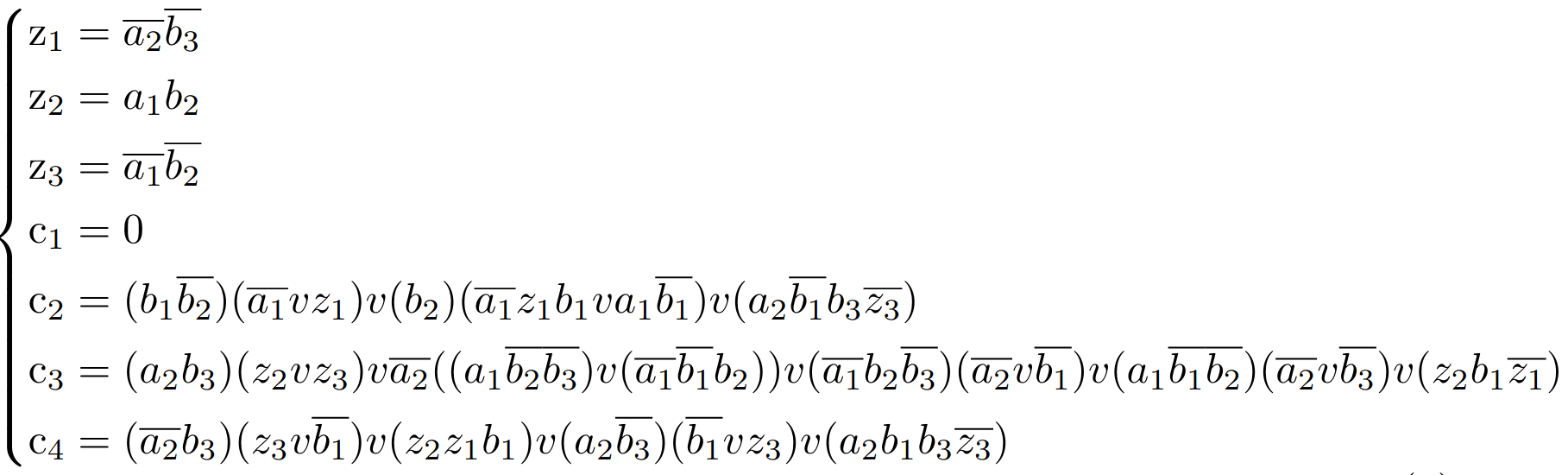
:

|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | **1** | **1** | 0 |
| 01 | 0 | **1** | 0 | 0 |
| 11 | **1** | 0 | **1** | 0 |
| 10 | **1** | 0 | 0 | **1** |

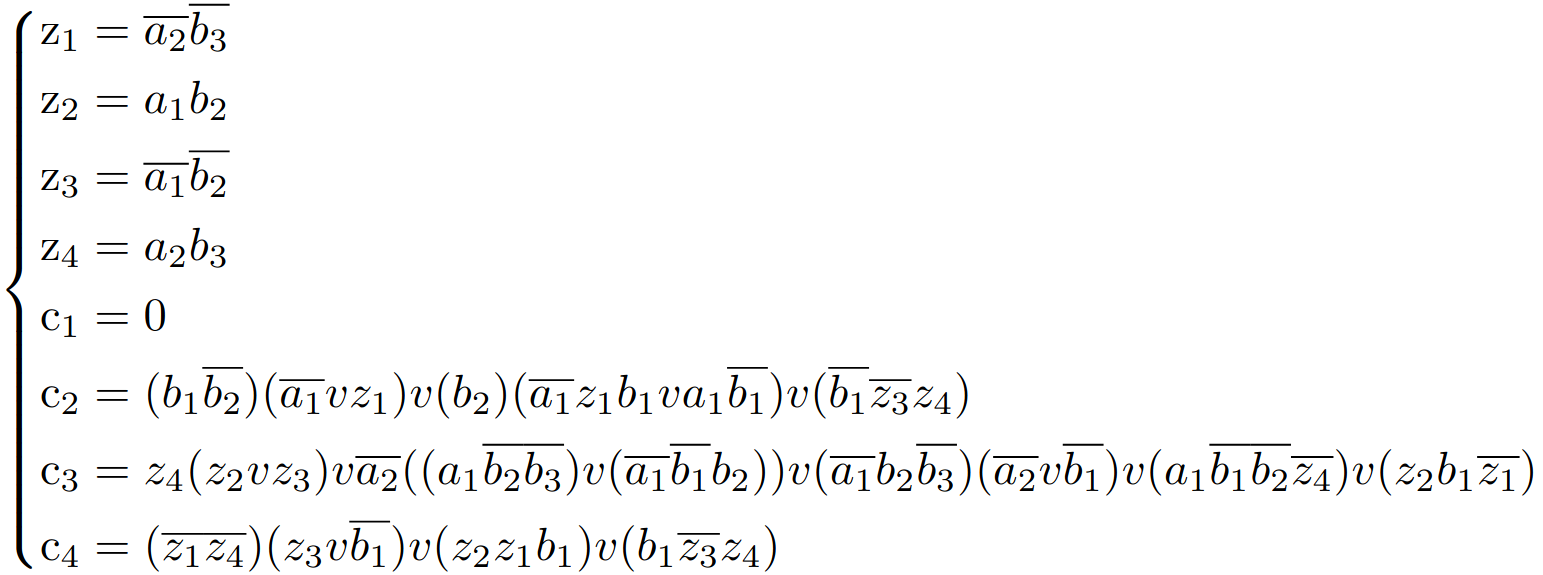
|  | 00 | 01 | 11 | 10 |
| --- | --- | --- | --- | --- |
| 00 | 0 | **1** | **1** | 0 |
| 01 | 0 | 0 | 0 | **1** |
| 11 | 0 | **1** | **1** | 0 |
| 10 | **1** | 0 | 0 | **1** |







(+2 за инверторы для z1, z3)



(+3 за инверторы для z1, z3, z4)

