Санкт-Петербургский национальный исследовательский университет ИТМО Факультет программной инженерии и компьютерной техники

**Домашняя работа №3**

по дисциплине “Дискретная математика”

Вариант 36

Выполнил:

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группа P3130

Преподаватель:

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Санкт-Петербург

2023

|  |  |
| --- | --- |
| **А** | **B** |
| 53 | 68 |

1. *А* = 53, *В* = 68.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* > 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*пр. | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |  | 53 |  | 53 |
| *B*пр. | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |  | 68 |  | 68 |
| *C*пр. | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |  | -15 |  | -15 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=1, | AF=0, | SF=1, | OF=0. |
|  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*доп. | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |  | -53 |  | 181 |
| *B*пр. | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |  | 68 |  | 68 |
| *C*доп. | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |  |  |  | 113 |
| *C*пр. | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |  | -121 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=0, | AF=1, | SF=1, | OF=0. |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* > 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*пр. | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |  | 53 |  | 53 |
| *B*доп. | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |  | -68 |  | 196 |
| *C*пр. | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |  | 121 |  | -143? |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=0, | AF=1, | SF=0, | OF=0. |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*доп. | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |  | -53 |  | 181 |
| *B*доп. | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |  | -68 |  | 196 |
| *C*доп. | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |  |  |  | 177? |
| *C*пр. | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |  | 15 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=1, | AF=0, | SF=0, | OF=1. |

**2.**

*А* = 53(неизменно), *В* = 126 (подбираем).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*доп. | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |  | -53 |  | 181 |
| *B*пр. | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |  | 126 |  | 126 |
| *C*пр. | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |  | 179? |  | 55 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=0, | ZF=0, | PF=1, | AF=0, | SF=0, | OF=1. |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* > 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*пр. | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |  | 53 |  | 67 |
| *B*доп. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |  | -126 |  | 192 |
| *C*доп. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |  |  |  | 1? |
| *C*пр. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |  | -179? |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=1, | AF=1, | SF=1, | OF=0. |

**3. B = 68; A = 60**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* > 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*пр. | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |  | 60 |  | 60 |
| *B*доп. | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |  | -68 |  | 196 |
| *C.* | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |  | -128? |  | 126? |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=1, | AF=0, | SF=1, | OF=0. |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *A*доп. | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |  | -60 |  | 188 |
| *B*пр. | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |  | 68 |  | 68 |
| *C*. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | -128 |  | 128 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CF=1, | ZF=0, | PF=1, | AF=0, | SF=0, | OF=1. |