Министерство образования и науки РФ

Федеральное государственное автономное

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«Санкт-Петербургский национальный исследовательский университет

информационных технологий, механики и оптики»

**факультет программной инженерии и компьютерной техники**

**ДОМАШНЯЯ РАБОТА № 7**

по дисциплине

‘Дискретная Математика’

Вариант №18

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# Пункт 1

A = 8,5

B = 0,011

## Ф1

A = 8,510 = 8,816 = 0,8816 × 161

ХА = РА + 64 = 6510 = 100 00012

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 |  |  |  |  |  | 7 | 8 |  |  |  |  |  |  |  |  |  |  | 19 |

B = 0,01110 ≈ 0,02D0E16 = 0,2D0E 16 × 16-1

ХА = РА + 64 = 6310 = 011 11112

1 округление к ближайшему

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| 0 | 1 |  |  |  |  |  | 7 | 8 |  |  |  |  |  |  |  |  |  |  | 19 |

## Ф2

A = 8,510 = 1000,10002 = 0,1000 10002 × 24

ХА = РА + 128 = 13210 = 1000 00002

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 |  |  |  |  |  |  |  | 8 | 9 |  |  |  |  |  |  |  |  |  | 19 |

B = 0,01110 ≈ 0,0000 0010 1101 0000 11102 = 0,1011 0100 0011 10002 × 2-6

ХА = РА + 128 = 12210 = 1000 01002

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 1 |  |  |  |  |  |  | 8 | 9 |  |  |  |  |  |  |  |  |  | 19 |

# Пункт 2