|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

Задание 2

Вариант 3.

|  |  |
| --- | --- |
| А | B |
| 100 | 26 |

1)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* > 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *А*пр. | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |  | 100 |  | 100 |
| *B*пр. | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |  | 26 |  | 26 |
| *С*пр. | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |  | 126 |  | 126 |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* > 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *А*пр. | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |  | 100 |  | 100 |
| *B*доп. | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |  | -26 |  | 230 |
| *С*пр | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |  | 74 |  | 74? |

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая | |
| *А*доп | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |  | -100 |  | 156 | |
| *B*пр. | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |  | 26 |  | 26 | |
| *С*доп. | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |  |  |  | 182 | |
| *С*пр. | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |  | -74 |  | |  |

Для беззнаковой интерпретации результат неверен вследствие возникающего переноса из старшего разряда. Вес этого переноса составляет 256. Тогда 100+230=330=256+74

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

Результат верен для обоих форматов.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *А*доп. | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |  | -100 |  | 156 |
| *B*доп. | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |  | -26 |  | 230 |
| *С*доп. | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |  |  |  | 130? |
| *С*пр. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |  | -126 |  |  |

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

Для беззнаковой интерпретации результат неверен вследствие возникающего переноса из старшего разряда. Вес этого переноса составляет 256. Тогда 256+130 = 386 = 156 + 230

2)

Пусть **B = 29.** Тогда А+B>128, что нам и необходимо.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А*  > 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *Апр*. | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |  | 100 |  | 100 |
| *B*пр. | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |  | 29 |  | 29 |
| *С*доп. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |  |  |  | 129 |
| *С*пр. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | -127? |  |  |

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

Для знакового сложения результат является некорректным вследствие переполнения формата.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *А*доп. | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |  | -100 |  | 199 |
| *B*доп. | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |  | -29 |  | 160 |
| *С*пр. | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 127? |  | 127? |

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

Для знакового сложения результат является некорректным вследствие переполнения формата. Для беззнакового сложения результат неверен из-за переноса из старшего разряда

3)

Пусть **A = 110.** Тогда А+B>128, что нам и необходимо.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А*  > 0, *B* > 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *Апр*. | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |  | 110 |  | 110 |
| *B*пр. | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |  | 26 |  | 26 |
| *С*доп. | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |  |  |  | 136 |
| *С*пр. | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |  | -120? |  |  |

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

Для знакового сложения результат является некорректным вследствие переполнения формата.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *А* < 0, *B* < 0. | | | | | | | | | Интерпретации | | | |
|  |  |  |  |  |  |  |  |  |  | Знаковая |  | Беззнаковая |
| *А*доп. | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |  | -110 |  | 146 |
| *B*доп. | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |  | -26 |  | 230 |
| *С*пр. | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |  | 120? |  | 120? |

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

Для знакового сложения результат является некорректным вследствие переполнения формата. Для беззнакового сложения результат неверен из-за переноса из старшего разряда