**4 Задание**

**29 Вариант**

**Умножение в доп. кодах с коррекцией:**

A = 34, B = 85

1. A < 0, B > 0

A = 1.1011110, B = 0.1010101

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| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 01010101 |
| 1. 11011110  -> 11101111 | 01010101  00101010 |
| 2. 11101111  -> 11110111 | 00101010  10010101 |
| 3. 11010101  -> 11101010 | 10010101  11001010 |
| 4. 11101010  -> 11110101 | 11001010  01100101 |
| 5. 11010011  -> 11101001 | 01100101  10110010 |
| 6. 11101001  -> 11110100 | 10110010  11011001 |
| 7. 11010010  -> 11101001 | 11011001  01101100 |
| 8. 11101001  -> 11110100 | 01101100  10110110 |

***A \* B:***

C[доп] = 1.111010010110110;

C[пр] = 1.000101101001010 = -2890;

-34 \* 85 = -2890 => A \* B = C

2. A > 0, B < 0

A = 0.0100010, B = 1.0101011;

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| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 10101011 |
| 1. 00100010  -> 00010001 | 10101011  01010101 |
| 2. 00110011  -> 00011001 | 01010101  10101010 |
| 3. 00011001  -> 00001100 | 10101010  11010101 |
| 4. 00101110  -> 00010111 | 11010101  01101010 |
| 5. 00010111  -> 00001011 | 01101010  10110101 |
| 6. 00101101  -> 00010110 | 10110101  11011010 |
| 7. 00010110  -> 00001011 | 11011010  01101101 |
| 8. 00101101  -> 00010110 | 01101101  10110110 |
| 9. 11011110  + 11110100 | -A[доп]  10110110 |

***A \* B:***

C[доп] = 1.111010010110110;

C[пр] = 1.000101101001010 = -2890;

34 \* -85 = -2890 => A \* B = C

3. A < 0, B < 0

A = 1.1011110, B = 1.0101011;

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| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 10101011 |
| 1. 11011110  -> 11101111 | 10101011  01010101 |
| 2. 11001101  -> 11100110 | 01010101  10101010 |
| 3. 11100110  -> 11110011 | 10101010  01010101 |
| 4. 11010001  -> 11101000 | 01010101  10101010 |
| 5. 11101000  -> 11110100 | 10101010  01010101 |
| 6. 11010010  -> 11101001 | 01010101  00101010 |
| 7. 11101001  -> 11110100 | 00101010  10010101 |
| 8. 11010010  -> 11101001 | 10010101  01001010 |
| 9. 00100010  + 00001011 | -A[доп]  01001010 |

***A \* B:***

C[пр] = 0.000101101001010 = 2890;

-34 \* -85 = 2890 => A \* B = C

4. A > 0, B > 0

A = 00100010, B = 01010101,

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| --- | --- |
| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 01010101 |
| 1. 00100010  -> 00010001 | 01010101  00101010 |
| 2. 00010001  -> 00001000 | 00101010  10010101 |
| 3. 00101010  -> 00010101 | 10010101  01001010 |
| 4. 00010101  -> 00001010 | 01001010  10100101 |
| 5. 00101100  -> 00010110 | 10100101  01010010 |
| 6. 00010110  -> 00001011 | 01010010  00101001 |
| 7. 00101101  -> 00010110 | 00101001  10010100 |
| 8. 00010110  -> 00001011 | 10010100  01001010 |

***A \* B:***

C[пр] = 0.000101101001010 = 2890;

34 \* 85 = 2890 => A \* B = C

**Умножение в доп. кодах без коррекции**

1. A > 0, B > 0

A = 00100010, B = 01010101, -A = 11011110

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| --- | --- |
| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 01010101 |
| 1. 11011110  -> 11101111 | 01010101  00101010 |
| 2. 00010001  -> 00001000 | 00101010  10010101 |
| 3. 11100110  -> 11110011 | 10010101  01001010 |
| 4. 00010101  -> 00001010 | 01001010  10100101 |
| 5. 11101000  -> 11110100 | 10100101  01010010 |
| 6. 00010110  -> 00001011 | 01010010  00101001 |
| 7. 11101001  -> 11110100 | 00101001  10010100 |
| 8. 00010110  -> 00001011 | 10010100  01001010 |

***A \* B:***

C[пр] = 0.000101101001010 = 2890;

34 \* 85 = 2890 => A \* B = C

2. A < 0, B > 0

A = 11011110, B = 01010101, -A = 00100010

|  |  |
| --- | --- |
| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 01010101 |
| 1. 00100010  -> 00010001 | 01010101  00101010 |
| 2. 11101111  -> 11110111 | 00101010  10010101 |
| 3. 00011001  -> 00001100 | 10010101  11001010 |
| 4. 11101010  -> 11110101 | 11001010  01100101 |
| 5. 00010111  -> 00001011 | 01100101  10110010 |
| 6. 11101001  -> 11110100 | 10110010  11011001 |
| 7. 00010110  -> 00001011 | 11011001  01101100 |
| 8. 11101001  -> 11110100 | 01101100  10110110 |

***A \* B:***

C[доп] = 1.111010010110110

C[пр] = 1.000101101001010 = -2890;

-34 \* 85 = 2890 => A \* B = C

3. A > 0, B < 0

A = 00100010, B = 10101011, -A = 11011110

|  |  |
| --- | --- |
| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 10101011 |
| 1. 11011110  -> 11101111 | 10101011  01010101 |
| 2. 11101111  -> 11110111 | 01010101  10101010 |
| 3. 00011001  -> 00001100 | 10101010  11010101 |
| 4. 11101010  -> 11110101 | 11010101  01101010 |
| 5. 00010111  -> 00001011 | 01101010  10110101 |
| 6. 11101001  -> 11110100 | 10110101  11011010 |
| 7. 00010110  -> 00001011 | 11011010  01101101 |
| 8. 11101001  -> 11110100 | 01101101  10110110 |

***A \* B:***

C[доп] = 1.111010010110110

C[пр] = 1.000101101001010 = -2890;

34 \* -85 = 2890 => A \* B = C

4. A < 0, B < 0

A = 11011110, B = 10101011, -A = 00100010

|  |  |
| --- | --- |
| **СЧП (старш.)** | **СЧП (мл.) и B** |
| 0. 00000000 | 10101011 |
| 1. 00100010  -> 00010001 | 10101011  01010101 |
| 2. 00010001  -> 00001000 | 01010101  10101010 |
| 3. 11011110  -> 11101111 | 10101010  01010101 |
| 4. 00010001  -> 00001000 | 01010101  10101010 |
| 5. 11100110  -> 11110011 | 10101010  01010101 |
| 6. 00010101  -> 00001010 | 01010101  10101010 |
| 7. 11101000  -> 11110100 | 10101010  01010101 |
| 8. 00010110  -> 00001011 | 01010101  00101010 |

***A \* B:***