Student 1 - Gog Alexandra

Student 2 - Graner Eduard

**TEAMS HOMEWORK**

Subject 1

b1 = 6 x = 125314 z = 48392B

b2 = 16 y = 34215 f = 5

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 1 |  |  | 1 |  |  |
| X(6) | 1 | 2 | 5 | 3 | 1 | 4 | + |
| y(6) |  | 3 | 4 | 2 | 1 | 5 |  |
| S(6) | 2 | 0 | 3 | 5 | 3 | 3 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 1 | 2 | 0 | 3 |  |  |
| z(16) |  | 4 | 8 | 3 | 9 | 2 | B | \* |
| f(16) |  |  |  |  |  |  | 5 |  |
| p(16) | 1 | 6 | 9 | 1 | D | D | 7 |  |

5\*11 = 55; 55 div 16 = 3 ; 55 mod 16 = 7

5\*2 = 10 = A(16)

5\*9 = 45; 45 div 16 = 2 ; 45 mod 16 = 13 = (D(16))

5\*3 = 15 = F(16)

5\*8 = 40; 40 div 16 = 2 ; 40 mod 16 = 8

5\*4 = 20; 20 div 16 = 1 ; 20 mod 16 = 4

Subject 3

Option 1

X = 12948 (10) = 31224 (8) = 011 001 010 010 100 (2) (rapid conversion)

Y = 19422 (10) = 4BDE (16) = 0100 1011 1101 1110 (2)

Z = 21566 (10) = 543E (16) = 0101 0100 0011 1110 (2)

12948 : 8 = 1618 1618 : 8 = 202 202 : 8 = 25 25 : 8 = 3 3 : 8 = 0

8 16 16 24 0

49 01 42 **r 1 r 3**

48 0 40

14 18 **r 2**

8 16

68  **r 2**

64

**r 4**

19422 : 16 = 1213 1213 :16 = 75 75: 16 = 4 4 : 16 = 0 **r 4**

16 112 64

34 93 **r 11**

32 80

22 **r 13**

16

62

48

**r 14**

21566 : 16 = 1347 1347 :16 = 84 84 :16 = 5 5:16 = 0 **r 5**

16 128 80

55 67  **r 4**

48 64

76 **r 3**

64

126

112

**r 14**

X = 12948 (10) = 31224 (8) = 011 001 010 010 100 (2)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[12948]dir=[12948]inv=[12948]compl** | **0** | **0** | **1** | **1** | **0** | **0** | **1** | **0** | **1** | **0** | **0** | **1** | **0** | **1** | **0** | **0** |
| **[-12948]dir** | **1** | **0** | **1** | **1** | **0** | **0** | **1** | **0** | **1** | **0** | **0** | **1** | **0** | **1** | **0** | **0** |
| **[-12948]inv** | **1** | **1** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **1** | **1** | **0** | **1** | **0** | **1** | **1** |
| **[-12948] compl** | **1** | **1** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **1** | **1** | **0** | **1** | **0** | **1** | **1** |

Y = 19422 (10) = 4BDE (16) = 0100 1011 1101 1110 (2)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[19422]dir=[19422]inv=[19422]compl** | **0** | **1** | **0** | **0** | **1** | **0** | **1** | **1** | **1** | **1** | **0** | **1** | **1** | **1** | **1** | **0** |
| **[-19422]dir** | **1** | **1** | **0** | **0** | **1** | **0** | **1** | **1** | **1** | **1** | **0** | **1** | **1** | **1** | **1** | **0** |
| **[-19422]inv** | **1** | **0** | **1** | **1** | **0** | **1** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **1** |
| **[-19422] compl** | **1** | **0** | **1** | **1** | **0** | **1** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **1** |

Z = 21566 (10) = 543E (16) = 0101 0100 0011 1110 (2)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[21566]dir=[21566]inv=[21566]compl** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** | **0** | **0** | **1** | **1** | **1** | **1** | **1** | **0** |
| **[-21566]dir** | **1** | **1** | **0** | **1** | **0** | **1** | **0** | **0** | **0** | **0** | **1** | **1** | **1** | **1** | **1** | **0** |
| **[-21566]inv** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **1** | **1** | **1** | **0** | **0** | **0** | **0** | **0** | **1** |
| **[-21566] compl** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **1** | **1** | **1** | **0** | **0** | **0** | **0** | **1** | **0** |