Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

```
0
    0
        1
             0 | 010
0
    0
                | 011
        1
             1
0
    1
        0
             0
                001
0
        0
                | 010
    1
             1
0
    1
        1
             0
                | 011
0
    1
        1
             1
               | 100
1
    0
        0
                | 010
1
    0
        0
             1
               | 011
1
             0 | 100
    0
        1
1
    0
        1
                | 101
             1
1
             0 | 011
    1
        0
1
    1
        0
             1
                | 100
1
    1
         1
             0
               | 101
1
    1
        1
             1
                | 110
```

Q4.

Tabela Verdade

> -**P2** Q1.

Tabela Verdade

1	0	0	0		110
1	0	0	1		111
1	0	1	0		100
1	0	1	1		101
1	1	0	0		111
1	1	0	1		000
1	1	1	0		101
1	1	1	1	1	110

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0		Sum
0	0	0	0		0000
0	0	0	1		0001
0	0	1	0		0001
0	0	1	1		0010
0	1	0	0		0010
0	1	0	1		0011
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0100
1	0	0	1		0101
1	0	1	0		0101
1	0	1	1		0110
1	1	0	0		0110
1	1	0	1		0111
1	1	1	0		0111
1	1	1	1	l	1000

Q3.

Tabela Verdade

```
Tabela Verdade
a_1 a_0 b_1 b_0 | Sum
  0 0 0 | 0000
0
   0
       0
           1 | 0001
           0 | 0010
0
   0
       1
0
   0
       1
           1 | 0011
           0 | 0001
0
       0
   1
0
   1
          1 | 0010
       0
0
   1
       1
           0 | 0011
0
   1
       1
           1 | 0100
1
   0
           0 | 0010
      0
1
   0 0
          1 | 0011
1
   0
      1
           0 | 0100
1
   0
      1
           1 | 0101
1
   1 0
          0 | 0011
1
       0
           1 | 0100
   1
1
   1
       1
           0 | 0101
```

1 | 0110

-**P3** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	110
1	0	0	1	111
1	0	1	0	100
1	0	1	1	101
1	1	0	0	111
1	1	0	1	000
1	1	1	0	101
1	1	1	1	110

Q2.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001

0	0	1	0		010
0	0	1	1		011
0	1	0	0		001
0	1	0	1		010
0	1	1	0		011
0	1	1	1		100
1	0	0	0		110
1	0	0	1		111
1	0	1	0		000
1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1	1	010

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_1	a_0	b_1	b_0	5	Sum
0	0	0	0	(000
0	0	0	1	(001
0	0	1	0	1	L10
0	0	1	1	1	l 11
0	1	0	0	(001
0	1	0	1	(010
0	1	1	0	1	l 11
0	1	1	1	(000
1	0	0	0	(010
1	0	0	1	()11
1	0	1	0	(000

```
    1
    0
    1
    1
    | 001

    1
    1
    0
    0
    | 011

    1
    1
    0
    1
    | 100

    1
    1
    1
    0
    | 001

    1
    1
    1
    1
    | 010
```

-

P4 Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	110
1	0	0	1	111
1	0	1	0	100
1	0	1	1	101
1	1	0	0	111
1	1	0	1	000
1	1	1	0	101
1	1	1	1	110

Q2.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011
1	0	1	1	0100
1	1	0	0	0101
1	1	0	1	0110
1	1	1	0	0111
1	1	1	1	1000

Q4.

Tabela Verdade

P5

Q1.

Tabela Verdade

a_2 a_1 a_0 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		001
0	0	1	1		010
0	1	0	0		010
0	1	0	1		011
0	1	1	0		011
0	1	1	1		100
1	0	0	0		100
1	0	0	1		101
1	0	1	0		101
1	0	1	1		110
1	1	0	0		110
1	1	0	1		111
1	1	1	0		111
1	1	1	1	1	000

Q2.

Tabela Verdade

a 0	b 2	b 1	b 0	1	Sum
0	0	0	0	Ì	0000
0	0	0	1		0001
0	0	1	0		0010
0	0	1	1		0011
0	1	0	0		0100
0	1	0	1		0101
0	1	1	0		0110
0	1	1	1		0111
1	0	0	0		0001
1	0	0	1		0010
1	0	1	0		0011
1	0	1	1		0100
1	1	0	0		0101
1	1	0	1		0110
1	1	1	0		0111
1	1	1	1		1000

Q3.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000

1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

> -**P6** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0		Sum
0	0	0	0		0000
0	0	0	1		0001
0	0	1	0		1110
0	0	1	1		1111
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		1111
0	1	1	1		0000
1	0	0	0		1110
1	0	0	1		1111
1	0	1	0		1100
1	0	1	1		1101
1	1	0	0		1111
1	1	0	1		0000
1	1	1	0		1101
1	1	1	1	Ì	1110

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001

```
1 | 010
0
   1
        0
0
    1
        1
            0 | 111
0
            1 | 000
   1
        1
1
    0
        0
            0 | 010
1
      0
           1 | 011
1
    0
        1
            0 | 000
           1 | 001
1
1
    1
           0 | 011
1
    1
        0
           1 | 100
1
    1
            0 | 001
        1
1
    1
        1
           1 | 010
```

P7 Q1.

Tabela Verdade

Iab	, <u> </u>	CIUC	iuc	
a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q2.

a_1	a_0	b_1	b_0	1	Sum
0	0	0	0	1	0000
0	0	0	1		0001
0	0	1	0		1110
0	0	1	1		1111
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		1111
0	1	1	1		0000
1	0	0	0		1110
1	0	0	1		1111
1	0	1	0		1100

1	0	1	1	1101
1	1	0	0	1111
1	1	0	1	0000
1	1	1	0	1101
1	1	1	1	1110

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0		${\tt Sum}$
0	0	0	0		000
0	0	0	1		001
0	0	1	0		010
0	0	1	1		011
0	1	0	0		001
0	1	0	1		010
0	1	1	0		011
0	1	1	1		100
1	0	0	0		010
1	0	0	1		011
1	0	1	0		100
1	0	1	1		101
1	1	0	0		011
1	1	0	1		100
1	1	1	0		101
1	1	1	1	ĺ	110

Q4.

Tabela Verdade

-

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_2 a_1 a_0 b_0 Sum
0 0 0 0 0 0 00
0 0 1 001
0 0 1 0 001

0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

> **P9** Q1.

Tabela Verdade

1	0	0	1		111
1	0	1	0		100
1	0	1	1		101
1	1	0	0		111
1	1	0	1		000
1	1	1	0		101
1	1	1	1		110

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q3.

Tabela Verdade

```
Tabela Verdade
a_1 a_0 b_1 b_0| Sum
  0 0 0 | 000
0
   0
       0
           1 | 001
0
   0
       1
           0 | 010
0
   0
       1
           1 | 011
0
       0
           0 | 001
   1
0
   1
           1 | 010
       0
0
   1
       1
           0 | 011
0
   1
       1
           1 | 100
1
   0
           0 | 110
       0
1
   0
       0
           1 | 111
1
   0
      1
           0 | 000
1
   0
      1
           1 | 001
1
   1
     0
           0 | 111
           1 | 000
1
   1
       0
1
   1
       1
           0 | 001
   1
       1
           1 | 010
```

-**P10** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q2.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001

0	0	1	0		1110
0	0	1	1		1111
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		1111
0	1	1	1		0000
1	0	0	0		1110
1	0	0	1		1111
1	0	1	0		1100
1	0	1	1		1101
1	1	0	0		1111
1	1	0	1		0000
1	1	1	0		1101
1	1	1	1	1	1110

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011

```
1 | 0100
1
    0
        1
1
   1
            0 | 0101
        0
            1 | 0110
1
   1
        0
1
    1
        1
            0 | 0111
1
    1
        1
            1 | 1000
```

<u>-</u> -

P11

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Q4.

Tabela Verdade

> -**P12** Q1.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		010
0	0	1	1		011
0	1	0	0		001
0	1	0	1		010
0	1	1	0		011
0	1	1	1		100
1	0	0	0		110
1	0	0	1		111
1	0	1	0		000
1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1	1	010

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	100
0	1	0	1	101
0	1	1	0	110
0	1	1	1	111
1	0	0	0	001
1	0	0	1	010
1	0	1	0	011

1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

> -**P13** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0		${\tt Sum}$
0	0	0	0		000
0	0	0	1		001
0	0	1	0		110
0	0	1	1		111
0	1	0	0		001
0	1	0	1		010
0	1	1	0		111
0	1	1	1		000
1	0	0	0		010
1	0	0	1		011
1	0	1	0		000
1	0	1	1		001
1	1	0	0		011
1	1	0	1		100
1	1	1	0		001
1	1	1	1	1	010

Q3.

Tabela Verdade

a_0	b_2	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	100
0	1	0	1	101
0	1	1	0	110
0	1	1	1	111
1	0	0	0	001
1	0	0	1	010
1	0	1	0	011
1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q4.

a_1	a_0	b_1	b_0	${\tt Sum}$
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	1110
0	0	1	1	1111
0	1	0	0	0001

```
1 | 0010
0
   1
       0
          0 | 1111
0
   1
       1
0
          1 | 0000
   1
       1
1
          0 | 1110
   0
     0
1
   0 0
         1 | 1111
1
   0 1
          0 | 1100
          1 | 1101
1
1
         0 | 1111
  1 0
1
 1 0
          1 | 0000
1
   1
       1
          0 | 1101
1
   1
       1
          1 | 1110
```

-**P14** Q1.

Tabela Verdade

1 45	- La	· OI a	140	
a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q2.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000

1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1		010

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0		Sum
0	0	0	0		000
0	0	0	1		001
0	0	1	0		001
0	0	1	1		010
0	1	0	0		010
0	1	0	1		011
0	1	1	0		011
0	1	1	1		100
1	0	0	0		100
1	0	0	1		101
1	0	1	0		101
1	0	1	1		110
1	1	0	0		110
1	1	0	1		111
1	1	1	0		111
1	1	1	1	ĺ	000

Q4.

Tabela Verdade

-

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 0 1 | 001 0 0 1 0 | 010

0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

P16 Q1.

Tabela Verdade

1	0	0	1		010
1	0	1	0		011
1	0	1	1		100
1	1	0	0		101
1	1	0	1		110
1	1	1	0		111
1	1	1	1		000

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

```
Tabela Verdade
a_1 a_0 b_1 b_0| Sum
       0
           0 | 000
0
    0
       0
           1 | 001
0
   0
       1
           0 | 110
0
   0
       1
           1 | 111
0
   1
       0
           0 | 001
0
   1
           1 | 010
0
       1
           0 | 111
   1
0
   1
       1
           1 | 000
1
   0
       0
           0 | 010
1
   0 0
           1 | 011
1
   0
      1
           0 | 000
1
   0
      1
           1 | 001
1
   1
           0 | 011
     0
           1 | 100
   1
1
   1
       1
           0 | 001
   1
           1 | 010
       1
```

-**P17** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q2.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		110
0	0	1	1		111
0	1	0	0		001
0	1	0	1		010
0	1	1	0		111
0	1	1	1		000
1	0	0	0		010
1	0	0	1		011
1	0	1	0		000
1	0	1	1		001
1	1	0	0		011
1	1	0	1		100
1	1	1	0		001
1	1	1	1		010

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101

```
1
    0
        1
            1 | 0110
1
   1
            0 | 0110
        0
            1 | 0111
1
   1
        0
1
    1
        1
            0 | 0111
1
    1
            1 | 1000
        1
```

-

P18

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Q4.

Tabela Verdade

> -**P19** Q1.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		110
0	0	1	1		111
0	1	0	0		001
0	1	0	1		010
0	1	1	0		111
0	1	1	1		000
1	0	0	0		110
1	0	0	1		111
1	0	1	0		100
1	0	1	1		101
1	1	0	0		111
1	1	0	1		000
1	1	1	0		101
1	1	1	1	1	110

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q3.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000

1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

> -**P20** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010

```
1 | 0011
0
    1
        0
0
    1
        1
            0 | 0011
            1 | 0100
0
    1
        1
1
    0
        0
            0 | 0100
1
    0
        0
            1 | 0101
1
    0
        1
            0 | 0101
1
    0
        1
            1 | 0110
            0 | 0110
1
    1
        0
1
            1 | 0111
    1
        0
1
    1
        1
            0 | 0111
1
    1
        1
            1 | 1000
```

P21 Q1.

Tabela Verdade

Q2.

Tabela Verdade

1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1		010

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

-

Tabela Verdade

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 0 1 | 001 0 0 1 0 | 010

0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

> **P23** Q1.

Tabela Verdade

1	0	0	1	010
1	0	1	0	011
1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

```
Tabela Verdade
a_2 a_1 a_0 b_0 | Sum
 0 0 0 | 0000
0
   0
      0
         1 | 0001
0
   0
      1
         0 | 0001
0
 0 1
         1 | 0010
0
 1
     0
        0 | 0010
0
 1 0
        1 | 0011
0
   1 1
        0 | 0011
0
   1 1
         1 | 0100
1
   0 0
        0 | 0100
1
   0 0
        1 | 0101
1
   0 1
        0 | 0101
         1 | 0110
1
   0 1
1
 1 0
        0 | 0110
1
 1 0
        1 | 0111
1
 1
      1
        0 | 0111
   1
        1 | 1000
      1
```

-**P24** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	110
1	0	0	1	111
1	0	1	0	100
1	0	1	1	101
1	1	0	0	111
1	1	0	1	000
1	1	1	0	101
1	1	1	1	110

Q2.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 0000 0 0 0 1 | 0001

0	0	1	0		0010
0	0	1	1		0011
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0010
1	0	0	1		0011
1	0	1	0		0100
1	0	1	1		0101
1	1	0	0		0011
1	1	0	1		0100
1	1	1	0		0101
1	1	1	1	1	0110

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000

1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

-

P25

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Tabela Verdade							
a_1	a_0	b_1	b_0		${\tt Sum}$		
0	0	0	0		000		
0	0	0	1		001		
0	0	1	0		010		
0	0	1	1		011		
0	1	0	0		001		
0	1	0	1		010		
0	1	1	0		011		

| 100 | 010

| 011

| 100 | 101

| 011 | 100 | 101

| 110

Q4.

Tabela Verdade

P26

Q1.

Tabela Verdade a_1 a_0 b_1 b_0 | Sum

0 | 000 1 | 001

0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q3.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	100
0	1	0	1	101
0	1	1	0	110
0	1	1	1	111
1	0	0	0	001
1	0	0	1	010
1	0	1	0	011

1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

P27 Q1.

Tabela Verdade

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

a_0	b_2	b_1	b_0	$\operatorname{\mathtt{Sum}}$
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100

```
1 | 0101
0
   1
      0
          0 | 0110
0
   1
      1
0
          1 | 0111
  1
      1
          0 | 0001
1
  0 0
1
  0 0
         1 | 0010
1
   0 1
          0 | 0011
         1 | 0100
1
 1 0
1
         0 | 0101
1 1 0
         1 | 0110
1
   1
          0 | 0111
      1
1
   1
     1
        1 | 1000
```

P**28**Q1.

Tabela Verdade

a_2	a_1	a_0	b_0		${\tt Sum}$
0	0	0	0		000
0	0	0	1		001
0	0	1	0		001
0	0	1	1		010
0	1	0	0		010
0	1	0	1		011
0	1	1	0		011
0	1	1	1		100
1	0	0	0		100
1	0	0	1		101
1	0	1	0		101
1	0	1	1		110
1	1	0	0		110
1	1	0	1		111
1	1	1	0		111
1	1	1	1	1	000

Q2.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011

1	0	1	1		0100
1	1	0	0		0101
1	1	0	1		0110
1	1	1	0		0111
1	1	1	1	1	1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	${\tt Sum}$
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

-

Tabela Verdade

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_2 a_1 a_0 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001 0 0 1 0 | 001

0	0	1	1	-	010
0	1	0	0		010
0	1	0	1		011
0	1	1	0		011
0	1	1	1		100
1	0	0	0		100
1	0	0	1		101
1	0	1	0		101
1	0	1	1		110
1	1	0	0		110
1	1	0	1		111
1	1	1	0		111
1	1	1	1		000

Q4.

Tabela Verdade

> -**P30** Q1.

Tabela Verdade

1	0	0	1		111
1	0	1	0		100
1	0	1	1		101
1	1	0	0		111
1	1	0	1		000
1	1	1	0		101
1	1	1	1		110

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q3.

Tabela Verdade

```
Tabela Verdade
a_0 b_2 b_1 b_0 | Sum
  0 0 0 | 0000
           1 | 0001
0
   0
       0
           0 | 0010
0
   0
       1
0
   0
       1
           1 | 0011
0
       0
           0 | 0100
   1
0
   1
           1 | 0101
       0
           0 | 0110
0
   1
       1
0
   1
       1
           1 | 0111
1
   0
           0 | 0001
       0
1
   0
       0
           1 | 0010
1
   0
      1
           0 | 0011
1
   0
      1
           1 | 0100
1
   1
     0
           0 | 0101
1
   1
           1 | 0110
1
   1
       1
           0 | 0111
   1
       1
           1 | 1000
```

-**P31** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	${\tt Sum}$
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q2.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001

0	0	1	0		110
0	0	1	1		111
0	1	0	0		001
0	1	0	1		010
0	1	1	0		111
0	1	1	1		000
1	0	0	0		010
1	0	0	1		011
1	0	1	0		000
1	0	1	1		001
1	1	0	0		011
1	1	0	1		100
1	1	1	0		001
1	1	1	1		010

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011

```
1
    0
        1
            1 | 0100
   1
            0 | 0101
1
        0
1
   1
        0
            1 | 0110
1
    1
        1
            0 | 0111
1
    1
            1 | 1000
        1
```

-

P32

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Tabela Verdade

Q4.

Tabela Verdade

P33

Q1.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		110
0	0	1	1		111
0	1	0	0		001
0	1	0	1		010
0	1	1	0		111
0	1	1	1		000
1	0	0	0		010
1	0	0	1		011
1	0	1	0		000
1	0	1	1		001
1	1	0	0		011
1	1	0	1		100
1	1	1	0		001
1	1	1	1	1	010

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0001
0	1	0	1	0010
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0010
1	0	0	1	0011
1	0	1	0	0100
1	0	1	1	0101
1	1	0	0	0011
1	1	0	1	0100
1	1	1	0	0101
1	1	1	1	0110

Q3.

Tabela Verdade a 2 a 1 a 0 b 0 | Si

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101

1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

P34 Q1.

Tabela Verdade

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	1110
0	0	1	1	1111
0	1	0	0	0001
0	1	0	1	0010
0	1	1	0	1111
0	1	1	1	0000
1	0	0	0	1110
1	0	0	1	1111
1	0	1	0	1100
1	0	1	1	1101
1	1	0	0	1111
1	1	0	1	0000
1	1	1	0	1101
1	1	1	1	1110

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010

```
1 | 0011
0
  1
     0
          0 | 0011
0
  1
      1
0
          1 | 0100
  1
     1
1
  0 0
          0 | 0100
1
  0 0
         1 | 0101
1
  0 1
          0 | 0101
         1 | 0110
1
1
 1 0
         0 | 0110
1 1 0
         1 | 0111
1
   1
          0 | 0111
      1
1
   1
      1
         1 | 1000
```

-**P35** Q1.

Tabela Verdade

a_0	b_2	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	100
0	1	0	1	101
0	1	1	0	110
0	1	1	1	111
1	0	0	0	001
1	0	0	1	010
1	0	1	0	011
1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q2.

- 0.0	140014 1014440						
a_1	a_0	b_1	b_0		Sum		
0	0	0	0		0000		
0	0	0	1		0001		
0	0	1	0		1110		
0	0	1	1		1111		
0	1	0	0		0001		
0	1	0	1		0010		
0	1	1	0		1111		
0	1	1	1		0000		
1	0	0	0		1110		
1	0	0	1		1111		
1	0	1	0		1100		

1	0	1	1	1101
1	1	0	0	1111
1	1	0	1	0000
1	1	1	0	1101
1	1	1	1	1110

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0		Sum
0	0	0	0		000
0	0	0	1		001
0	0	1	0		010
0	0	1	1		011
0	1	0	0		001
0	1	0	1		010
0	1	1	0		011
0	1	1	1		100
1	0	0	0		110
1	0	0	1		111
1	0	1	0		000
1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1	l	010

Q4.

Tabela Verdade

-

Tabela Verdade

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 0 1 | 001 0 0 1 0 | 110

0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

P37 Q1.

Tabela Verdade

1	0	0	1		111
1	0	1	0		000
1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1		010

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0001
0	1	0	1	0010
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0010
1	0	0	1	0011
1	0	1	0	0100
1	0	1	1	0101
1	1	0	0	0011
1	1	0	1	0100
1	1	1	0	0101
1	1	1	1	0110

Q3.

Tabela Verdade

```
Tabela Verdade
a_2 a_1 a_0 b_0 | Sum
 0 0 0 | 0000
0
   0
      0
         1 | 0001
0
   0
      1
         0 | 0001
0
 0 1
         1 | 0010
0
     0
 1
         0 | 0010
0
 1 0
         1 | 0011
0
   1 1
         0 | 0011
0
   1 1
         1 | 0100
1
   0 0
        0 | 0100
1
   0 0
        1 | 0101
1
   0 1
         0 | 0101
         1 | 0110
1
   0 1
1 1 0
        0 | 0110
1
 1 0
        1 | 0111
1
 1
      1
        0 | 0111
```

1 | 1000

-**P38** Q1.

1

1

Tabela Verdade

a_0	b_2	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	100
0	1	0	1	101
0	1	1	0	110
0	1	1	1	111
1	0	0	0	001
1	0	0	1	010
1	0	1	0	011
1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q2.

Tabela Verdade

a_2 a_1 a_0 b_0 | Sum 0 0 0 0 | 0000 0 0 1 | 0001

0	0	1	0		0001
0	0	1	1		0010
0	1	0	0		0010
0	1	0	1		0011
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0100
1	0	0	1		0101
1	0	1	0		0101
1	0	1	1		0110
1	1	0	0		0110
1	1	0	1		0111
1	1	1	0		0111
1	1	1	1	Ī	1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q4.

a_1	a_0	b_1	b_0	1	Sum
0	0	0	0		0000
0	0	0	1		0001
0	0	1	0		1110
0	0	1	1		1111
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		1111
0	1	1	1		0000
1	0	0	0		1110
1	0	0	1		1111
1	0	1	0		1100

```
1
    0
        1
            1 | 1101
1
   1
            0 | 1111
        0
            1 | 0000
1
   1
        0
1
    1
        1
            0 | 1101
1
    1
            1 | 1110
        1
```

-

P39

Q1.

Tabela Verdade

Q2.

Tabela Verdade

```
Tabela Verdade
a_1 \ a_0 \ b_1 \ b_0 | \ Sum
  0 0 0 | 000
0
    0
        0
           1 | 001
0
    0
        1
           0 | 010
0
    0
        1
           1 | 011
0
    1
       0
           0 | 001
0
   1
           1 | 010
       0
0
       1
           0 | 011
    1
0
    1
       1
           1 | 100
1
    0
       0
           0 | 110
1
    0
       0
           1 | 111
1
    0
      1
           0 | 000
1
    0
      1
           1 | 001
1
   1
           0 | 111
       0
           1 | 000
       0
   1
1
    1
        1
           0 | 001
```

Q4.

1 | 010

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	1110
0	0	1	1	1111
0	1	0	0	0001
0	1	0	1	0010
0	1	1	0	1111
0	1	1	1	0000
1	0	0	0	1110
1	0	0	1	1111
1	0	1	0	1100
1	0	1	1	1101
1	1	0	0	1111
1	1	0	1	0000
1	1	1	0	1101
1	1	1	1	1110

-**P40** Q1.

Tabela Verdade

a_0 b_2 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		010
0	0	1	1		011
0	1	0	0		100
0	1	0	1		101
0	1	1	0		110
0	1	1	1		111
1	0	0	0		001
1	0	0	1		010
1	0	1	0		011
1	0	1	1		100
1	1	0	0		101
1	1	0	1		110
1	1	1	0		111
1	1	1	1	1	000

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q3.

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101

1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

P41 Q1.

Tabela Verdade

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

a_0	b_2	b_1	b_0	$\operatorname{\mathtt{Sum}}$
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100

```
1 | 0101
0
    1
        0
0
    1
        1
            0 | 0110
0
    1
        1
            1 | 0111
1
    0
        0
            0 | 0001
1
    0
            1 | 0010
        0
1
    0
        1
            0 | 0011
1
    0
        1
            1 | 0100
1
    1
        0
            0 | 0101
1
            1 | 0110
    1
        0
1
    1
        1
            0 | 0111
1
        1
            1 | 1000
    1
```

-**P42** Q1.

Tabela Verdade

Q2.

Tabela Verdade

1	0	1	1		0110
1	1	0	0		0110
1	1	0	1		0111
1	1	1	0		0111
1	1	1	1		1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	${\tt Sum}$
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

Tabela Verdade

-

Tabela Verdade

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_2 a_1 a_0 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001 0 0 1 0 | 001

0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

P44 Q1.

Tabela Verdade

1	0	0	1	010
1	0	1	0	011
1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

```
Tabela Verdade
a_1 a_0 b_1 b_0| Sum
        0
            0 | 000
0
    0
        0
            1 | 001
0
    0
        1
            0 | 110
0
    0
        1
            1 | 111
            0 | 001
0
        0
    1
0
   1
            1 | 010
        0
            0 | 111
0
    1
        1
0
    1
        1
            1 | 000
1
    0
            0 | 010
        0
1
    0
        0
            1 | 011
1
    0
        1
            0 | 000
1
    0
        1
            1 | 001
1
    1
        0
            0 | 011
            1 | 100
1
    1
        0
1
    1
        1
            0 | 001
    1
        1
            1 | 010
```

-**P45** Q1.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q2.

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001

0	0	1	0		0001
0	0	1	1		0010
0	1	0	0		0010
0	1	0	1		0011
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0100
1	0	0	1		0101
1	0	1	0		0101
1	0	1	1		0110
1	1	0	0		0110
1	1	0	1		0111
1	1	1	0		0111
1	1	1	1	1	1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q4.

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101

```
1
    0
        1
            1 | 0110
1
   1
            0 | 0110
        0
            1 | 0111
1
   1
        0
1
    1
        1
            0 | 0111
1
    1
            1 | 1000
        1
```

-

P46

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Tabela Verdade							
a_0	b_1	b_0		${\tt Sum}$			
0	0	0		000			
0	0	1		001			
0	1	0		110			
0	1	1		111			
1	0	0		001			
1	0	1		010			
	a_0 0 0 0 0 0	a_0 b_1 0 0 0 0 0 1 0 1 1 0	a_0 b_1 b_0 0 0 0 0 0 0 1 0 0 0 1 1 1 1 0 0 0	a_0 b_1 b_0 0 0 0 0 0 1 0 1 0 0 1 1 1 0 0			

1 0 0 0 | 010 1 0 0 1 | 011

1 1 0 1 | 100 1 1 1 0 | 001

. 1 1 1 | 010

Q4.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

-**P47** Q1.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100

1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q4.

Tabela Verdade

P48 Q1.

Tabela Verdade

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_1	a_0	b_1	b_0		\mathtt{Sum}
0	0	0	0		0000
0	0	0	1		0001
0	0	1	0		1110
0	0	1	1		1111
0	1	0	0	1	0001

```
1 | 0010
0
   1
       0
          0 | 1111
0
   1
       1
0
          1 | 0000
   1
       1
1
          0 | 1110
   0
     0
1
   0 0
          1 | 1111
1
   0 1
          0 | 1100
          1 | 1101
1
1
         0 | 1111
  1 0
1
 1 0
          1 | 0000
1
   1
       1
          0 | 1101
1
   1
       1
          1 | 1110
```

-**P49** Q1.

Tabela Verdade

1 40	- La	OLG	140	
a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q2.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000

1	0	1	1		001
1	1	0	0		111
1	1	0	1		000
1	1	1	0		001
1	1	1	1	1	010

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

-

Tabela Verdade

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_2 a_1 a_0 b_0 | Sum 0 0 0 0 | 000 0 0 0 1 | 001 0 0 1 0 | 001

0	1	1		010
1	0	0		010
1	0	1		011
1	1	0		011
1	1	1		100
0	0	0		100
0	0	1		101
0	1	0		101
0	1	1		110
1	0	0		110
1	0	1		111
1	1	0		111
1	1	1		000
	1 1 1 0 0 0 0	1 0 1 0 1 1 1 1 0 0 0 0 0 1 0 1 1 0 1 0	1 0 0 1 0 1 1 1 0 1 1 1 0 0 0 0 0 1 0 1 0 0 1 1 1 0 0 1 1 0 1 1 0	1 0 0 1 0 1 1 1 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 0 1 0 0 1 1 1 0 0 1 0 1 0 1 1 0 1 1 1 0 0

Q4.

Tabela Verdade

P51 Q1.

Tabela Verdade

1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	1110
0	0	1	1	1111
0	1	0	0	0001
0	1	0	1	0010
0	1	1	0	1111
0	1	1	1	0000
1	0	0	0	1110
1	0	0	1	1111
1	0	1	0	1100
1	0	1	1	1101
1	1	0	0	1111
1	1	0	1	0000
1	1	1	0	1101
1	1	1	1	1110

Q3.

Tabela Verdade

```
Tabela Verdade
a_0 b_2 b_1 b_0 | Sum
   0 0 0 | 0000
0
    0
        0
            1 | 0001
0
    0
        1
            0 | 0010
0
    0
        1
           1 | 0011
0
        0
           0 | 0100
    1
0
    1
           1 | 0101
        0
0
    1
        1
           0 | 0110
0
    1
        1
           1 | 0111
1
    0
           0 | 0001
        0
1
    0
        0
            1 | 0010
1
    0
        1
           0 | 0011
1
    0
        1
           1 | 0100
1
    1
        0
           0 | 0101
        0
            1 | 0110
1
    1
1
    1
        1
           0 | 0111
    1
        1
           1 | 1000
```

-**P52** Q1.

Tabela Verdade

Ido	, <u> </u>	CIUC	iuc	
a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q2.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001

0	0	1	0		0010
0	0	1	1		0011
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0010
1	0	0	1		0011
1	0	1	0		0100
1	0	1	1		0101
1	1	0	0		0011
1	1	0	1		0100
1	1	1	0		0101
1	1	1	1	1	0110

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	110
1	0	0	1	111
1	0	1	0	000
1	0	1	1	001
1	1	0	0	111
1	1	0	1	000
1	1	1	0	001
1	1	1	1	010

Q4.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011

```
1
    0
        1
            1 | 0100
1
   1
            0 | 0101
        0
            1 | 0110
1
   1
        0
1
    1
        1
            0 | 0111
1
    1
            1 | 1000
        1
```

--

P53

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Tabela Verdade							
a_1	a_0	b_1	b_0		Sum		
0	0	0	0		000		
0	0	0	1		001		
0	0	1	0		110		
0	0	1	1		111		
0	1	0	0		001		
0	1	0	1		010		
0	1	1	0		111		
0	1	1	1		000		
1	0	0	0		110		
1	0	0	1		111		
1	0	1	0	1	100		

 1
 1
 0
 1
 | 000

 1
 1
 1
 0
 | 101

 1
 1
 1
 1
 1

1 0 0 | 111

1 | 101

Q4.

Tabela Verdade

0 1

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011
1	0	1	1	0100
1	1	0	0	0101
1	1	0	1	0110
1	1	1	0	0111
1	1	1	1	1000

-**P54** Q1.

Tabela Verdade

a_2 a_1 a_0 b_0 | Sum 0 0 0 0 | 000 0 0 1 | 001

0	0	1	0		001
0	0	1	1		010
0	1	0	0		010
0	1	0	1		011
0	1	1	0		011
0	1	1	1		100
1	0	0	0		100
1	0	0	1		101
1	0	1	0		101
1	0	1	1		110
1	1	0	0		110
1	1	0	1		111
1	1	1	0		111
1	1	1	1		000

Q2.

Tabela Verdade

a_1	a_0	b_1	b_0	,	Sum
0	0	0	0	(0000
0	0	0	1	(0001
0	0	1	0	(010
0	0	1	1	(0011
0	1	0	0	(0001
0	1	0	1	(010
0	1	1	0	(0011
0	1	1	1	(0100
1	0	0	0	(010
1	0	0	1	(0011
1	0	1	0	(100
1	0	1	1	(0101
1	1	0	0	(0011
1	1	0	1	(0100
1	1	1	0	(0101
1	1	1	1	(0110

Q3.

a_0	b_2	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	100
0	1	0	1	101
0	1	1	0	110
0	1	1	1	111
1	0	0	0	001
1	0	0	1	010
1	0	1	0	011

1	0	1	1	100
1	1	0	0	101
1	1	0	1	110
1	1	1	0	111
1	1	1	1	000

Q4.

Tabela Verdade

> -**P55** Q1.

Tabela Verdade

Tabela Verdade

a_0	b_2	b_1	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0010
0	0	1	1	0011
0	1	0	0	0100
0	1	0	1	0101
0	1	1	0	0110
0	1	1	1	0111
1	0	0	0	0001
1	0	0	1	0010
1	0	1	0	0011
1	0	1	1	0100
1	1	0	0	0101
1	1	0	1	0110
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	110
1	0	0	1	111
1	0	1	0	100
1	0	1	1	101
1	1	0	0	111
1	1	0	1	000
1	1	1	0	101
1	1	1	1	110

Q4.

a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	010
0	0	1	1	011
0	1	0	0	001

```
1 | 010
0
   1
       0
           0 | 011
0
   1
       1
0
           1 | 100
   1
       1
1
   0
       0
           0 | 110
1
      0
           1 | 111
1
   0
       1
           0 | 000
           1 | 001
1
1
   1
           0 | 111
1
           1 | 000
   1
       0
1
   1
           0 | 001
       1
1
           1 | 010
   1
       1
```

-**P56** Q1.

Tabela Verdade

1 000	JIG	CIUC	iuc	
a_1	a_0	b_1	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	110
0	0	1	1	111
0	1	0	0	001
0	1	0	1	010
0	1	1	0	111
0	1	1	1	000
1	0	0	0	010
1	0	0	1	011
1	0	1	0	000
1	0	1	1	001
1	1	0	0	011
1	1	0	1	100
1	1	1	0	001
1	1	1	1	010

Q2.

- 0	_ 1	- ^	h ^	. 1	C
a_2	a_1	a_0	b_0	'	Sum
0	0	0	0		0000
0	0	0	1		0001
0	0	1	0		0001
0	0	1	1		0010
0	1	0	0		0010
0	1	0	1		0011
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0100
1	0	0	1		0101
1	0	1	0		0101

1	0	1	1		0110
1	1	0	0		0110
1	1	0	1		0111
1	1	1	0		0111
1	1	1	1	1	1000

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sι	ım
0	0	0	0	0(00
0	0	0	1	0(01
0	0	1	0	0(01
0	0	1	1	0:	10
0	1	0	0	0:	10
0	1	0	1	0:	11
0	1	1	0	0:	11
0	1	1	1	1(00
1	0	0	0	1(00
1	0	0	1	1(01
1	0	1	0	1(01
1	0	1	1	1:	10
1	1	0	0	1:	10
1	1	0	1	1:	11
1	1	1	0	1:	11
1	1	1	1	0.0	ეე

Q4.

Tabela Verdade

a_0	b_1	b_0		${\tt Sum}$
0	0	0		000
0	0	1		001
0	1	0		010
0	1	1		011
1	0	0		001
1	0	1		010
1	1	0		011
1	1	1		100
0	0	0		110
0	0	1		111
0	1	0		000
0	1	1		001
1	0	0		111
1	0	1		000
1	1	0		001
1	1	1		010
	0 0 0 0 1 1 1 1 0 0 0 0 1 1 1 1	0 0 0 0 0 0 0 1 1 0 1 1 1 0 0 0 0 1 1 0 1	0 0 0 0 0 1 0 1 0 0 1 1 1 0 0 1 1 1 0 0 0 0 0 1 0 1 0 0 1 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1	0 0 0 0 0 1 0 1 0 0 1 1 1 0 0 1 1 1 1 1 1 0 0 0 0 1 0 0 1 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 <

-

Tabela Verdade

Q2.

Tabela Verdade

Q3.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 000 0 0 0 1 | 001 0 0 1 0 | 010

0	0	1	1	011
0	1	0	0	001
0	1	0	1	010
0	1	1	0	011
0	1	1	1	100
1	0	0	0	010
1	0	0	1	011
1	0	1	0	100
1	0	1	1	101
1	1	0	0	011
1	1	0	1	100
1	1	1	0	101
1	1	1	1	110

Q4.

Tabela Verdade

P58 Q1.

Tabela Verdade

1	0	0	1		111
1	0	1	0		100
1	0	1	1		101
1	1	0	0		111
1	1	0	1		000
1	1	1	0		101
1	1	1	1		110

Q2.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	0000
0	0	0	1	0001
0	0	1	0	0001
0	0	1	1	0010
0	1	0	0	0010
0	1	0	1	0011
0	1	1	0	0011
0	1	1	1	0100
1	0	0	0	0100
1	0	0	1	0101
1	0	1	0	0101
1	0	1	1	0110
1	1	0	0	0110
1	1	0	1	0111
1	1	1	0	0111
1	1	1	1	1000

Q3.

Tabela Verdade

```
Tabela Verdade
a_1 a_0 b_1 b_0| Sum
  0 0 0 | 000
          1 | 001
0
   0
       0
0
   0
       1
          0 | 010
0
   0
     1
          1 | 011
0
   1
      0
          0 | 001
0
  1 0
         1 | 010
0
       1
          0 | 011
   1
0
   1
     1
          1 | 100
1
   0 0
          0 | 110
1
   0 0
          1 | 111
1
   0 1
          0 | 000
          1 | 001
1
   0
     1
1 1 0
         0 | 111
          1 | 000
     0
1
   1
1
   1
       1
          0 | 001
   1
          1 | 010
       1
```

-**P59** Q1.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q2.

Tabela Verdade

a_1 a_0 b_1 b_0 | Sum 0 0 0 0 | 0000 0 0 1 | 0001

0	0	1	0		1110
0	0	1	1		1111
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		1111
0	1	1	1		0000
1	0	0	0		1110
1	0	0	1		1111
1	0	1	0		1100
1	0	1	1		1101
1	1	0	0		1111
1	1	0	1		0000
1	1	1	0		1101
1	1	1	1	1	1110

Q3.

Tabela Verdade

a_2	a_1	a_0	b_0	Sum
0	0	0	0	000
0	0	0	1	001
0	0	1	0	001
0	0	1	1	010
0	1	0	0	010
0	1	0	1	011
0	1	1	0	011
0	1	1	1	100
1	0	0	0	100
1	0	0	1	101
1	0	1	0	101
1	0	1	1	110
1	1	0	0	110
1	1	0	1	111
1	1	1	0	111
1	1	1	1	000

Q4.

a_1	a_0	b_1	b_0	5	um
0	0	0	0		00
0	0	0	1		01
0	0	1	0	(10
0	0	1	1	(11
0	1	0	0		01
0	1	0	1	(10
0	1	1	0		11
0	1	1	1	1	.00
1	0	0	0	1	.10
1	0	0	1	1	.11
1	0	1	0		00

```
1
    0
        1
            1 | 001
1
    1
            0 | 111
        0
            1 | 000
1
    1
        0
1
    1
        1
            0 | 001
1
    1
            1 | 010
        1
```

-_

P60

Q1.

Tabela Verdade

Q2.

Tabela Verdade

Tabela Verdade					
a_2	a_1	a_0	b_0		Sum
0	0	0	0		000
0	0	0	1		001
0	0	1	0		001
0	0	1	1		010
0	1	0	0		010
0	1	0	1		011
0	1	1	0		011
0	1	1	1		100
1	0	0	0		100
1	0	0	1		101
1	0	1	0		101
1	0	1	1		110
1	1	0	0		110
1	1	0	1		111
1	1	1	0		111
1	1	1	1		000

Q4.

a_1	a_0	b_1	b_0	1	Sum
0	0	0	0		0000
0	0	0	1		0001
0	0	1	0		0010
0	0	1	1		0011
0	1	0	0		0001
0	1	0	1		0010
0	1	1	0		0011
0	1	1	1		0100
1	0	0	0		0010
1	0	0	1		0011
1	0	1	0		0100
1	0	1	1		0101
1	1	0	0		0011
1	1	0	1		0100
1	1	1	0		0101
1	1	1	1		0110