

- ①  
a) F  
b) F  
c) F  
d) V  
e) V

- ② a) 

0
1

 int caso vc  
  
Sinal de magnitude  
  
b) 

100 x 2
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 representações  
  
= 200 8 bits  
 $2^8 = 256$   
  
c) Contar quantos ~~bits~~  
Começar com 0

③ A 00110111  
B 11100101  
  
a)  $A + (-B)$   
 $-B = 00011010$   
$$\begin{array}{r} 00011010 \\ + 00110111 \\ \hline 01010010 \end{array}$$

b)  $B - (-B) = B + B$   
$$\begin{array}{r} 11100101 \\ + 11100101 \\ \hline 11001010 \end{array}$$

④  $x = 01110011$   

-12
-----

  
$$\begin{array}{r} 01111111 \\ 01110011 \\ \hline 00001100 \quad 1 \times 1 \end{array}$$
  
SM 10001100  
C1 11110011  
C2 11110100

⑤  $(96)_{10} = (01100000)$   
 $(0,47) \quad 0,011110000101000111101$   
  
b) 

0110000001
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c)  $(127)_{10} (01111111)_2$   
 $(6)_{10} (110)_2$   
Exponente 10000101  

10000101
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47
2
0,94
1,88
1,76
1,52
1,04
0,08
0,16
0,32
0,64
1,28
0,56
1,12
0,24
0,48
0,96

  

1,92
1,84
1,68
1,36
0,72
1,44
0,88
1,76
...

③ A 00110111  
B 11100101

a)  $A + (-B)$

$-B =$

0	0	0	1	1	0	1	0
							1
<hr/>							
0	0	0	1	1	0	1	1

$+$

			1	1	1	1	1
0	0	1	1	0	1	1	1
0	0	0	1	1	0	1	1
<hr/>							
0	1	0	1	0	0	1	0

$$b) B - (-B) \in B + B$$

$$\begin{array}{r}
 + \quad 11100101 \\
 11100101 \\
 \hline
 11001010
 \end{array}$$

4)  $x = 01110011$   
 $\boxed{-12_{10}}$

SM 10001100  
C1 11110011  
C2 11110100

$$\begin{array}{r} 0111111 \\ 0111001 \\ \hline 00001100 \end{array} \quad (x)$$

⑤  $(96)_{10} = (01100000)$   
 $(0,47) \quad 0,011110000101000111010 \dots$

$$\begin{array}{r} 47 \\ 2 \\ \hline 0,94 \\ 1,88 \\ 1,76 \\ 1,52 \\ 1,04 \\ 0,08 \\ 0,16 \\ 0,32 \\ 0,64 \\ 1,28 \\ 0,56 \\ 1,12 \\ 0,24 \\ 0,48 \\ 0,96 \end{array}$$

b)  $0,10000001110001000111010 \dots \times 2^6$

c)  $(127)_{10} = (0111111)_2$   
 $(6)_{10} = (110)_2$

Exponent 10000101

0 10000101 | 10000000 111100016 | 0001000