

# PROCESSORS - Assignment 2

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ES 4)

a)  $100 = 01100100$  (8 BIT)

$-100 = 10011011 +$

$1 =$

$10011100 +$

$01100100 =$

$-100 + 100$

(1) 0000 0000  
0 cccc ccc

b)  $7 = 0000 0111$  (8 BIT)

$13 = 0000 1101$  (8 BIT)

~~$-13 = 1111 0010 +$   
 $1 =$   
 $1111 0011 +$   
 $+ 7 = 0000 0111 =$~~

$-13 = 13 + \rightarrow$   
 $7$   
 $29$   
 $100$   
 $0000 0111 +$   
 $0000 1101 =$   
 $0001 0100$   
 $cccc$

5) c)  $1111 1111 1101 0110$  (16 BIT)

~~0000 0000~~

d)  $0000 0101 0011 1001$  (16-BIT)

5a. Generators parameters are different in order to change the clock speed from top left to right period is 1, 2, 4, and 8 (seconds).

