



**BIRZEIT UNIVERSITY**  
Electrical and Computer Engineering  
QUIZ #2

ENCS238 (Computer Organization)

Spring Semester 2017

Name: .....

ID: .....

1) Represent  $(-28)_{10}$  as a signed integer with the following representations, using minimum number of bits.

a) Two's complement representation [2pts]

b) Sign magnitude representation [2pts]

c) Bias representation [2pts]

2) Use 8-bit floating-point number representation as shown in the following figure to represent  $(-3.75)_{10}$  [4pts]

1 bit Sign bit	3 bits exponent	4 bits significant
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