HW2: Negative Values In Binary

Due Jan 16 at 11:59pm **Points** 10 **Questions** 6 **Available** Jan 9 at 12am - Jan 23 at 11:59pm 15 days
Time Limit None

Instructions

- 2's complement conversions
- binary arithmetic with negative values

This quiz was locked Jan 23 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	47 minutes	10 out of 10

Score for this quiz: **10** out of 10
Submitted Jan 10 at 9:03am
This attempt took 47 minutes.

Question 1

1 / 1 pts

Convert the signed decimal value -115 to 8-bit signed binary

Correct!

- (•) 10001101
- ( ) 10010111
- ( ) 10001000
- ( ) 10010010

Question 2

1 / 1 pts

Convert the signed decimal value -110 to 8-bit signed binary

- ( ) 10001101
- ( ) 10001000

Correct!

- (•) 10010010

10010111

Question 3

5 / 5 pts

In a given 8-bit computer system, values are represented in two's complement form. Match each binary value with its decimal equivalent.

Correct!	**01000111**	71
Correct!	**01110000**	112
Correct!	**11000001**	-63
Correct!	**10010111**	-105
Correct!	**01010101**	85

Other Incorrect Match Options:

- 101
- −86
- 124
- -113
- 61

Question 4

1 / 1 pts

Add the two signed 8-bit values 00111001 and 00101000 using binary arithmetic. If Signed Overflow occurs enter OVERFLOW! for your answer.

11000100

OVERFLOW!

10001010

- 01111001
- 01111010
- 00111100

Correct!

- 01100001

Question 5

1 / 1 pts

Add the two signed 8-bit values 00111101 and 00111101 using binary arithmetic. If Signed Overflow occurs enter OVERFLOW! for your answer.

- OVERFLOW!

Correct!

- 01111010
- 01100001
- 01111001
- 00111100
- 10001010
- 11000100

Question 6

1 / 1 pts

Add the two signed 8-bit values 01011000 and 00110010 using binary arithmetic. If Signed Overflow occurs enter OVERFLOW! for your answer.

- 10001010
- 01100001

Correct!

- OVERFLOW!

- 11000100
- 01111010
- 00111100
- 01111001

Quiz Score: **10** out of 10