

HW1.3. Number Representation (Randomized)

Translate the following values between the given number formats, if possible. For binary and hexadecimal answers, include the appropriate prefix (0b for binary, 0x for hex).

All binary and hexadecimal values are **8-bit values**.

*Tip: When you are converting to a different number representation, take note of the **range** of allowable values that can be represented in 8 bits. That is, what is the **smallest and largest number** that can be written given the desired number representation?*

**If the value cannot be written in the required format, submit "N/A"**

Q1.1: Translate 216 from decimal to unsigned hexadecimal

unsigned hexadecimal value:

?

Q1.2: Translate 0x52 from 2's complement hexadecimal to decimal

decimal value:

?

Q1.3: Translate 156 from decimal to 2's complement binary

2's complement binary value:

?

Q1.4: Translate -81 from decimal to unsigned binary

unsigned binary value:

?

Q1.5: Translate 17 from decimal to unsigned binary

unsigned binary value:

?

Q1.6: Translate -73 from decimal to 2's complement binary

2's complement binary value:

?

Q1.7: Translate 0b10001000 from 2's complement binary to decimal

decimal value:

?

Q1.8: Translate 81 from decimal to unsigned binary

unsigned binary value:

?

Save & Grade20 attempts left

Save only

Additional attempts available with new variants?

Homework 1

Assessment overview

Total points:

100/100

Score:

100%

Question

Value:

20

History:

20

Awarded points:

20/20

Report an error in this question

Previous question

Next question

Attached files

No attached files

Attach a file

Attach text