Module 1B: Binary Arithmetic

MTH 225
9 Sept 2020

Agenda

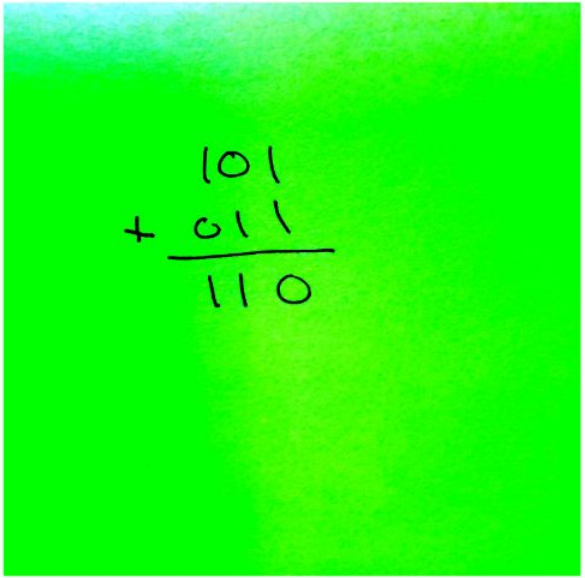
- Review of Daily Prep activity + Q/A time
- Minilecture with practice: Subtraction, multiplication, and division in binary
- Wrap up with ungraded quiz + feedback time

(Review) The decimal integer 15 represented in binary is

- 1001
- 1111
- 11001
- 11110
- None of these

To 0

Here's an attempt to add the binary integers 101 and 011. What, if anything, is wrong with it?



- In the first addition step, 1+1 is 2, not 0
- They forgot to carry a 1 after the first addition step
- In the second and third steps, 1+0 is supposed to be 0
- Nothing is wrong -- 110 is the correct answer

To 0

What *should* the answer for 101 + 011 in binary be?

- 100
- 010
- 1000
- 1110
- None of the above

To 0

The decimal integer 22 is represented in 6-bit binary as 010110. Using two's complement, the 6-bit binary for -22 is

- 011010
- 001010
- 101010
- 101001

Q&A TIME

Minilecture and Class Activities

https://jamboard.google.com/d/1vAgjnYGtdfP8fuc3ho-HAU7-1cNBxN7Jc_Hl8hIo9d4/edit?usp=sharing

Posted on Blackboard, Campuswire

Concept quiz

Go to app.classkick.com and enter the code **YLZ 9KH**.

Or click on https://app.classkick.com/#/login/YLZ9KH

Feedback:
http://gvsu.edu/s/1rF

Add sticky notes for comments,
ideas, and questions.

Next

- **Class Activities from today**: Due 11:59pm Eastern, Tuesday September 10. If you were present or synchronous, just complete the page on the Jamboard; if asynchronous, look for link on Blackboard in Module 1 folder.
- **Friday**: Time for questions, more practice, wrapping up.
- Startup Assignment final due date: 11:59pm Eastern Friday September 11
- Daily Prep for Module 2A: Due 11:59pm Eastern, Sunday September 13