

## Week 2 Friday

Friday, April 9, 2021

4:09 PM

Computers can do basic operations: addition, subtraction, multiplication, and division

- multiplication is shift and addition
- division is shift and subtraction
- addition is more exclusive xor

Trig functions made by basic operations

### IEEE Floating Point Standard

32 bits total

sign	exponent	mantissa
1 bit	8 bits	23 bits

Decimal Representation

-floating point form is obtained by chopping or rounding the mantissa

Floating point numbers are not real numbers

Floating point numbers are a subset of rational numbers