

# Review for Final

## Names

- Charles Babbage - Analytical engine
- Henry Briggs - Common logarithms (base 10)
- Vannevar Bush - Differential analyzer
- John Harrison - Longitude clock prize
- Hollerith - Punched cards
- Lord Kelvin - Tide predictors
- John Napier - Natural logarithms (base e)
- Alan Turing - German code breaking
- Konrad Zuse - Mechanical calculator/used movie film/relay technology
- Tom Kurtz and John Kemeny - Inventors of BASIC
- Ken Lochner - inventor of UNIX pipes idea
- Alan Kay - instigator of Smalltalk

## Roman Numerals MMDCCCLXXVII

## Logarithms and interpolation

- Slide Rule

## Complement Arithmetic

## Computer architecture

- 1, 2, 3, 4, 1+1, 0 address computers
- serial and parallel
- variable word length

## Programming the LGP 30

- subroutine calling
- bootstrapping

## FORTRAN Computer language

## ALGOL 60 Computer Language

- BNF notation

## Computers

- LGP30 - serial binary 1 address
- IBM650 - serial decimal 1+1 address
- APEXC - serial binary 1+1 address
- IBM704 - parallel binary 1 address
- IBM7030 "stretch" - parallel binary 1 address
- IBM1401 - variable word length decimal 2 address
- IBM1620 - variable word length decimal 2 address
- Burroughs 5500 - parallel binary 0 address machine
- ALGOL computer
- CDC6600 - parallel binary "3" address
- "scoreboard" instruction scheduling
- multiple functional units
- first "supercomputer"
- Data General NOVA - parallel binary 1 address
- minicomputer
- Xerox ALTO - microcoded
- bit mapped display, mouse, ethernet

## Dartmouth Timesharing

- First non computer specialist friendly timesharing system
- 2 machines
- DN30 for communications and control
- GE235 for compiling and running user programs

## ARPANET - early routing algorithm

## XEROX

- ALTO computer
- bitmap text editors with multiple fonts
- pioneer in graphical user interfaces
- Ethernet - early protocols
- Smalltalk
- Interlisp-D
- JaM and the beginnings of postscript