1. Terminology
    - absolute accuracy
    - accurate digits
    - algorithm
    - asymptotic
    - backward error
    - backward substitution
    - bandwidth
    - big-O notation
    - cancellation error
    - Cholesky factorization
    - condition number
    - double precision
    - floating point numbers
    - flops
    - forward substitution
    - Frobenius norm
    - Gaussian elimination
    - hermitian
    - identity matrix
    - ill-conditioned
    - induced matrix norm
    - interpolation
    - linear least squares problem
    - loss of precision
    - LU factorization
    - machine epsilon
    - matrix condition number
    - norm
    - normal equations
    - ONC matrix
    - orthogonal
    - orthogonal matrix
    - orthonormal
    - overdetermined
    - permutation matrix
    - PLU factorization
    - precision
    - pseudoinverse
    - QR factorization
    - relative accuracy
    - residual
    - row pivoting
    - sparse
    - stability
    - subtractive cancellation
    - symmetric matrix
    - symmetric positive definite matrix
    - triangular matrix
    - tridiagonal matrix
    - unit triangular matrix
    - unit vector
    - unstable algorithm
    - Vandermonde matrix
2. Algorithms
    - Horner's Method
    - forwardsub, backsub
    - lufact, lu, qr
3. Be able to
    - Write out floating point sets.
    - Find closest floating point number to x.
    - Find absolute or relative error.
    - Find number of accurate digits.
    - IEEE standard: single and double precision.
    - Determine relative condition number.
    - Use relative condition number.
    - Stability of quadratic formula.
    - Relate backward error to stability.
    - Interpolate small data set.
    - Know matrix types and operations.
    - Carry out Gaussian elimination.
    - Use triangular systems.
    - Explain key algorithms.
    - Work with asymptotic limits.
    - Count flops.
    - Determine vector and matrix norms.
    - Discuss matrix conditioning.
    - Relate residual and backward error.
    - Fit linear, exponential, power law data.
    - Identify matrix types - orthogonal, hermitian, symmetric, transpose, etc.