## EECS 210 Section 2 – Lecture Summaries Lecture 22, Monday, March 5, 2001

- Circuits with resistors and energy storage devices

   require solving a linear differential equation (LDE)
   If capacitors and resistors 1<sup>st</sup> order LDE
   If inductors and resistors 1<sup>st</sup> order LDE
   If capacitors, inductors, and resistors 2<sup>nd</sup> order LDE
- Use superposition to solve for frequency components
- Use complex algebra
  - ≻ To separate in-phase and quadrature source functions
  - ≻ To simplify solution of LDE's
  - > Yields frequency domain equation in terms of phasors