Review For Midterm

- Chapters 1 and 2
- p - operator for C and L but no solving of Differential equations.
- No questions Directly from Lab
- Will Look at Homeworks ① ②
- Basically KCL, KVL, Branch relations (Node equations, Mesh Equations)
- No LTSpice
- Calculators Allowed - No "cheat sheets"
- No feedback or flow graphs.
  But could ask you indirectly,
  Eg show that

$$v_i = v_s + v_f$$
$$v_o = +A\, v_i$$
$$v_f = F\, v_o$$

for same configuration

deduce v_o / v_s

ans.

$$v_o = +A\, v_i$$
$$= +A(v_s + v_f)$$
$$= +A(v_s + F v_o)$$

So $v_o(1 - AF) = A v_s$

Thus $v_o = \frac{A v_s}{1 - AF}$

- Thevenin an Norton equivalents