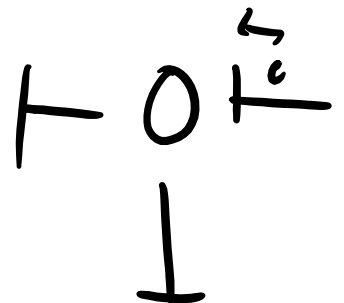
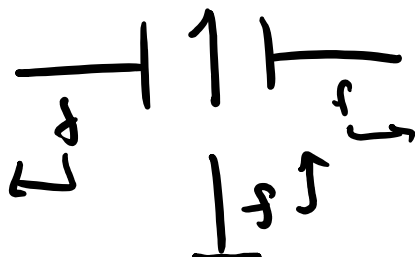
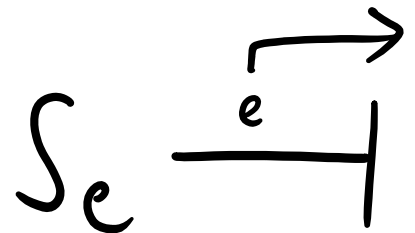
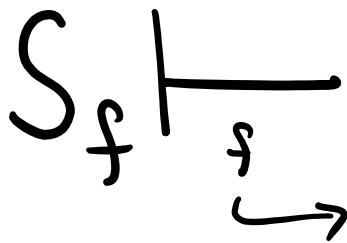


- HW 4 Due Monday
- Labs: Lab 2 intro, publish()

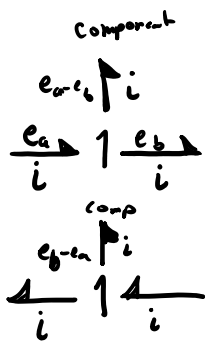
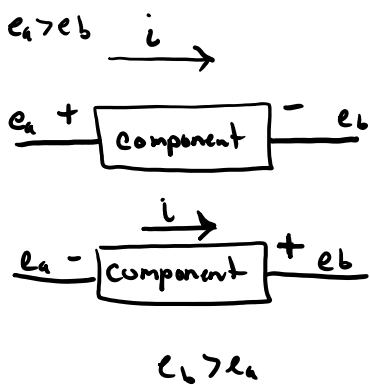
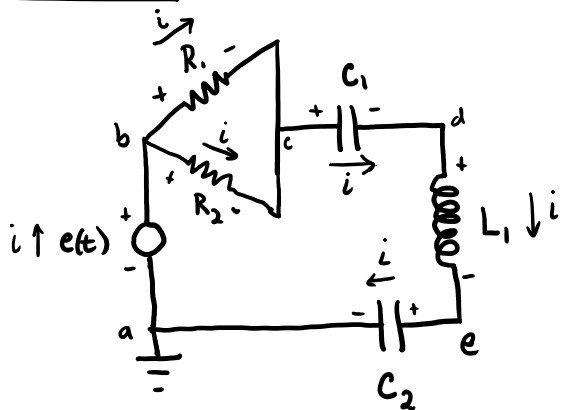


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Exercise



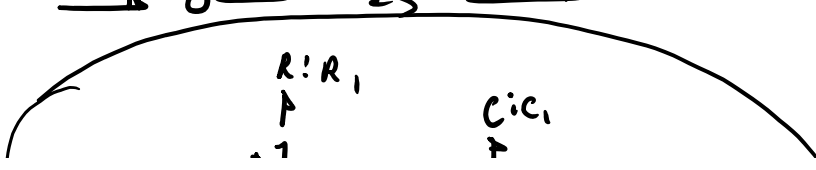
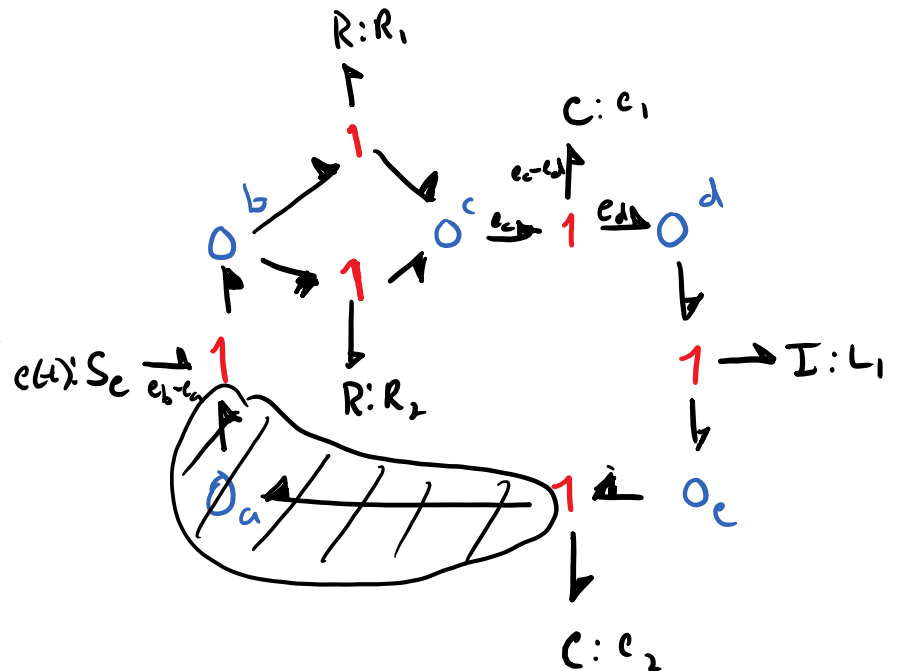
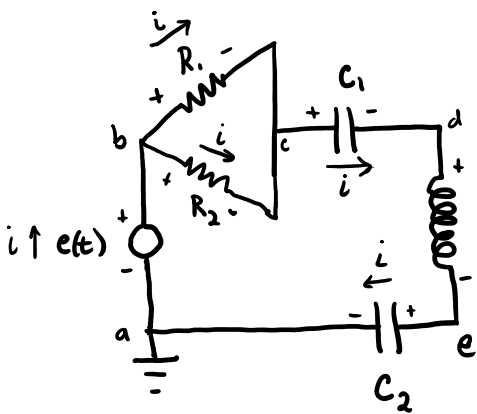
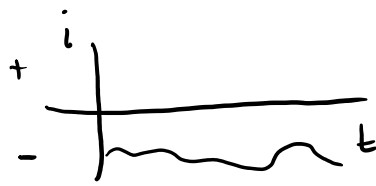
Step 1: assign power convention to voltage + current

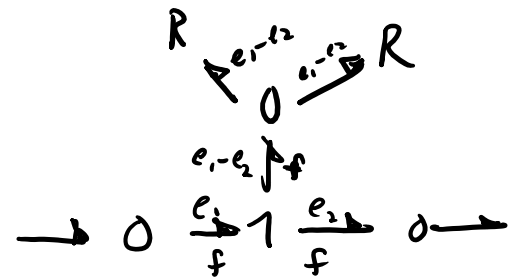
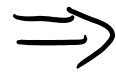
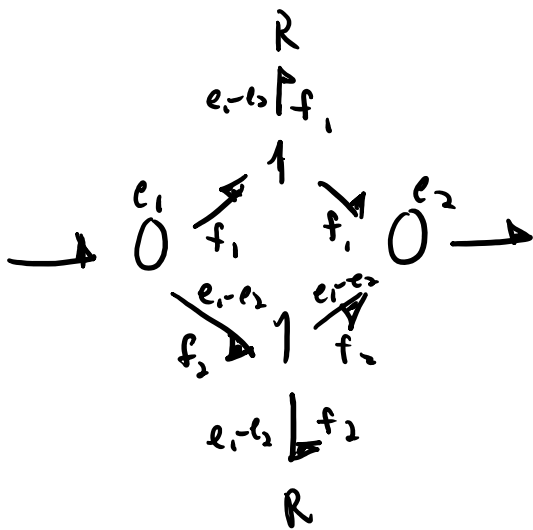
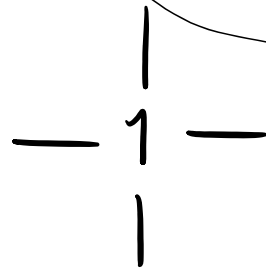
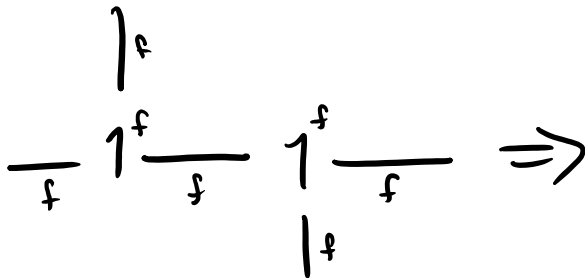
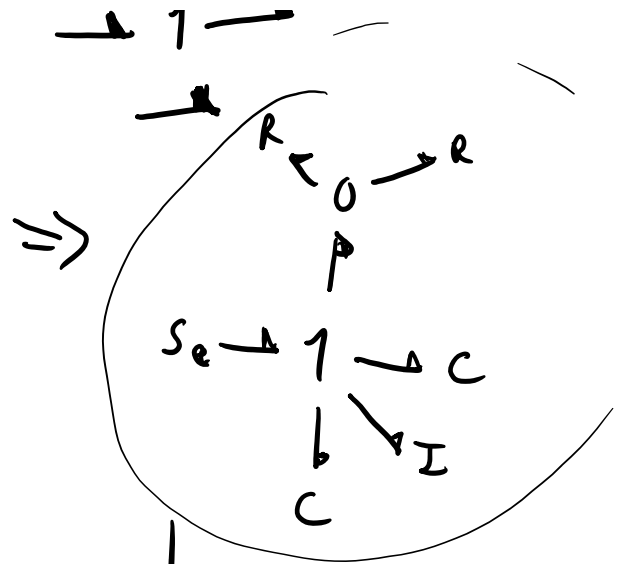
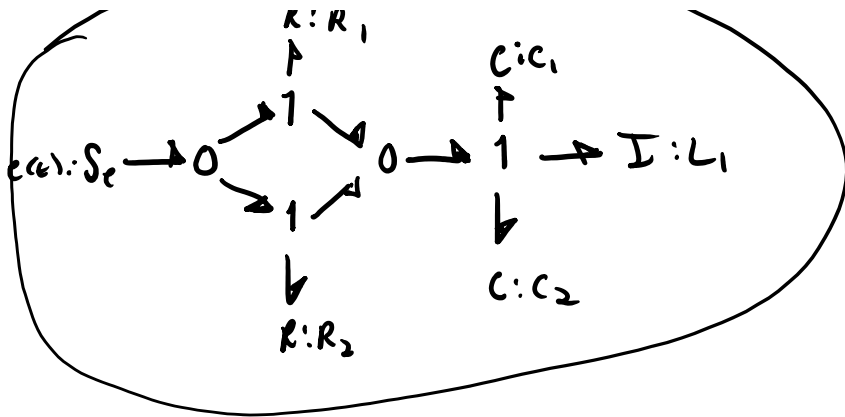
Step 2: create \odot junctions for each node with common voltage

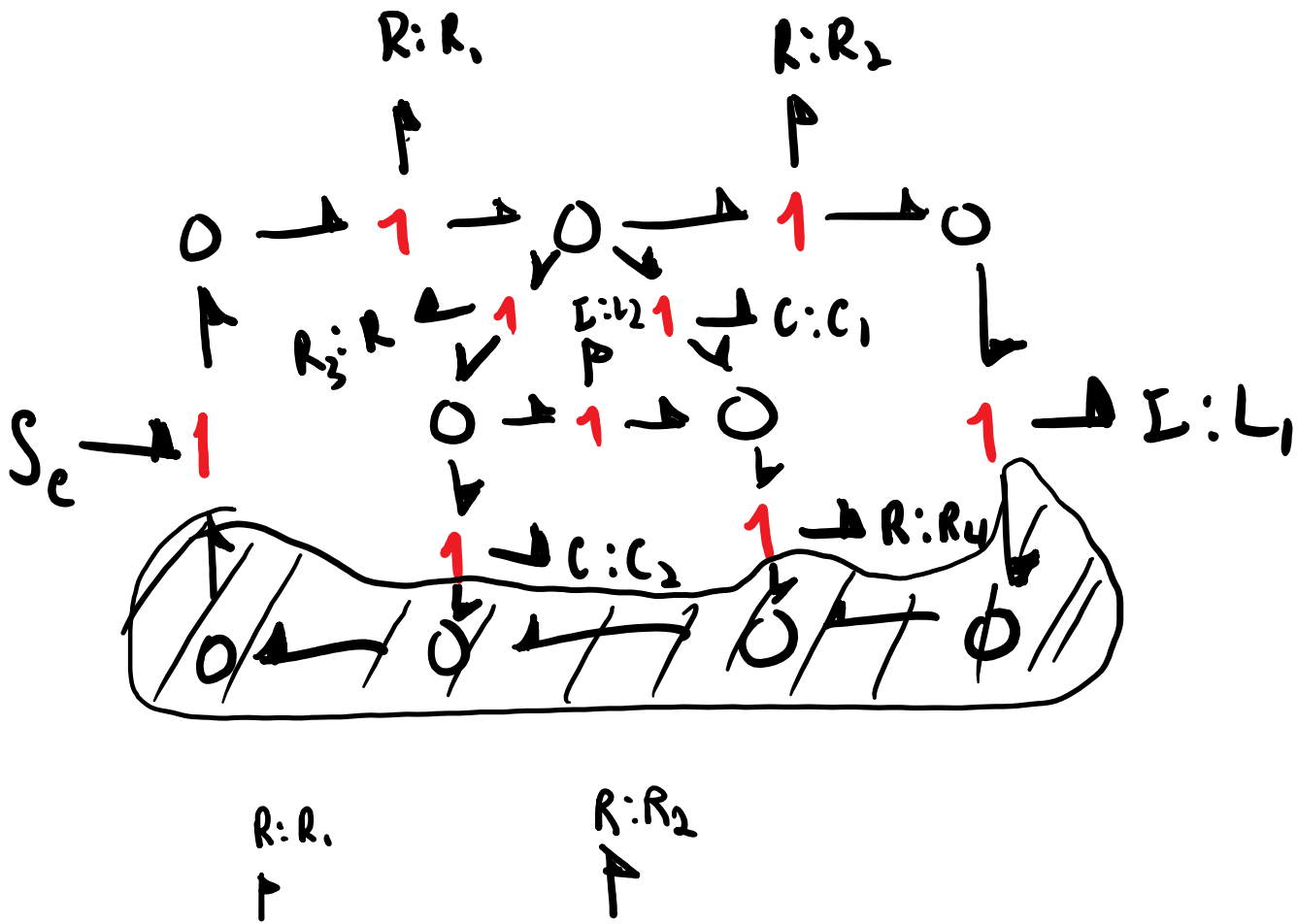
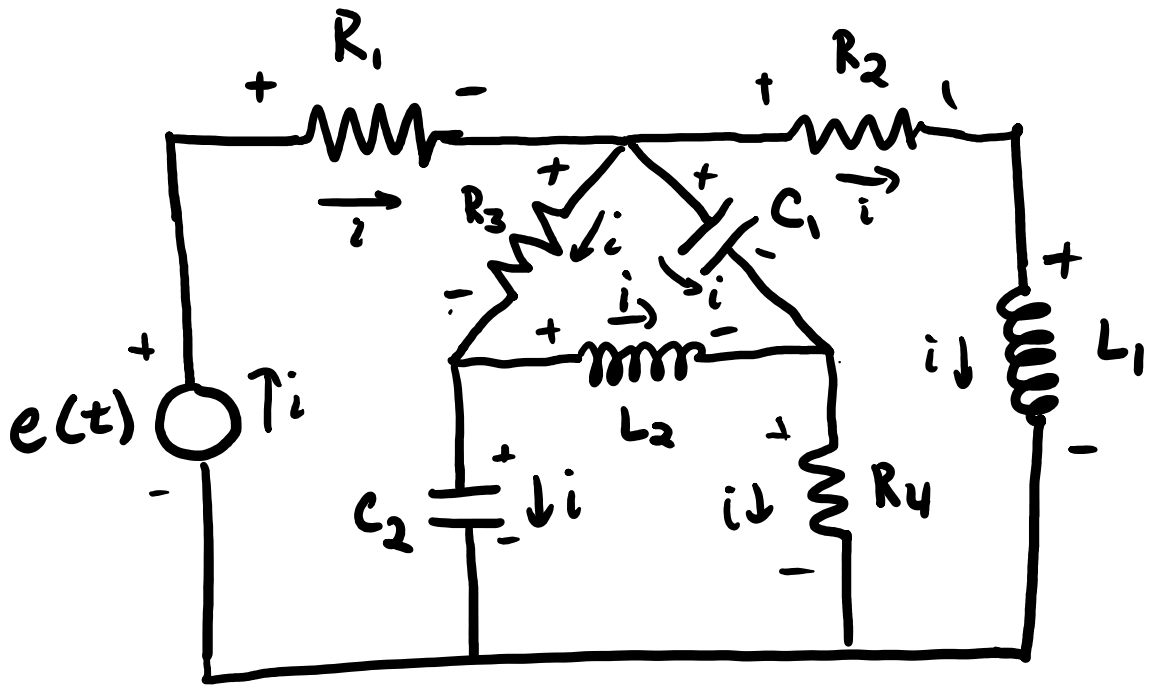
Step 3: create \downarrow junctions to establish voltage drops

Step 4: choose ground/reference node, set voltage to zero (thus power), and eliminate connected nodes

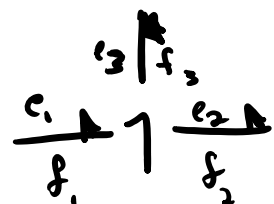
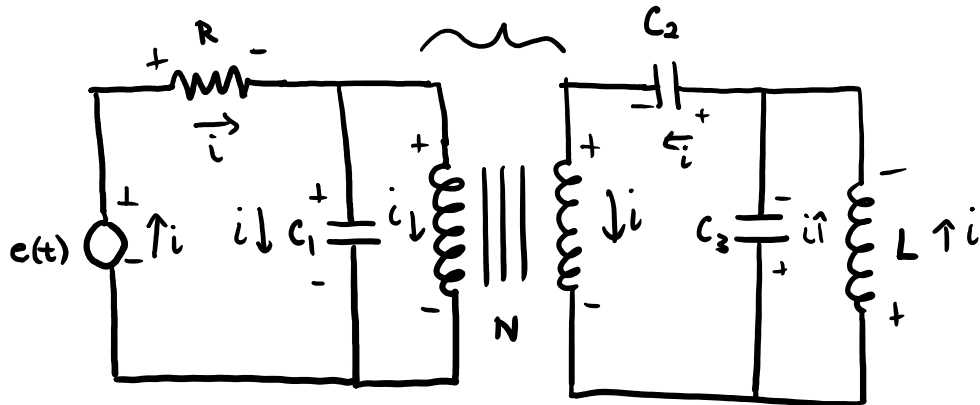
Step 5: simplify the graph







transformer

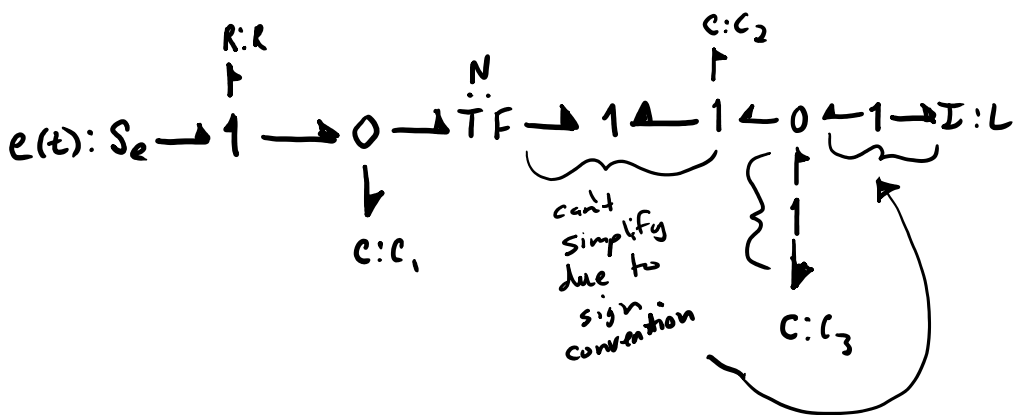
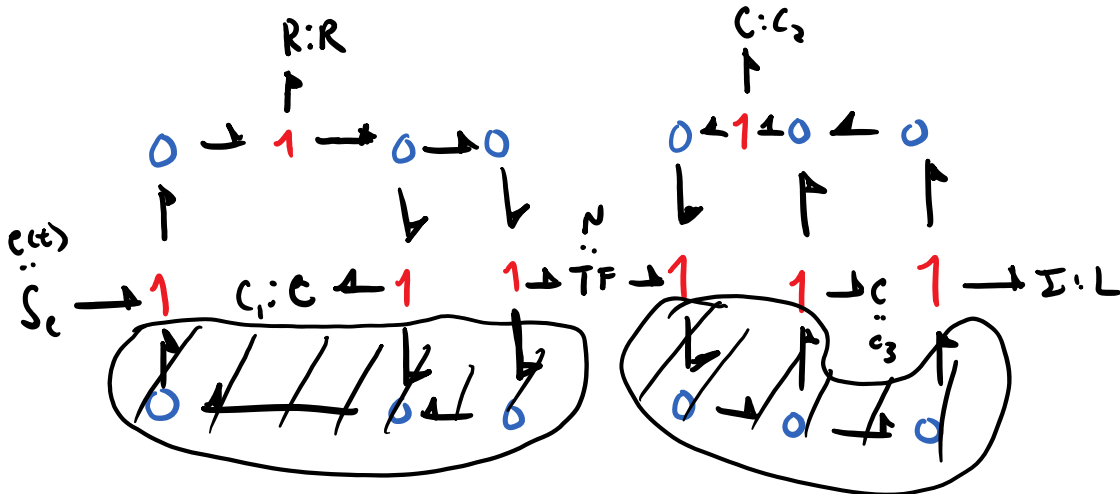


$$-f_1 = -f_2 = -f_3$$

$$f_1 = f_2 = f_3$$

$$e_2 = e_1 - e_3$$

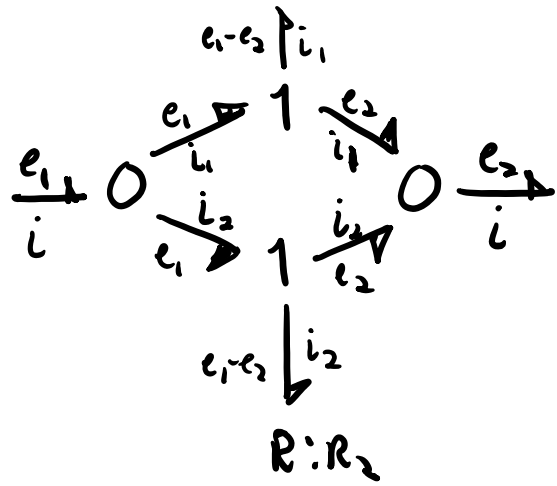
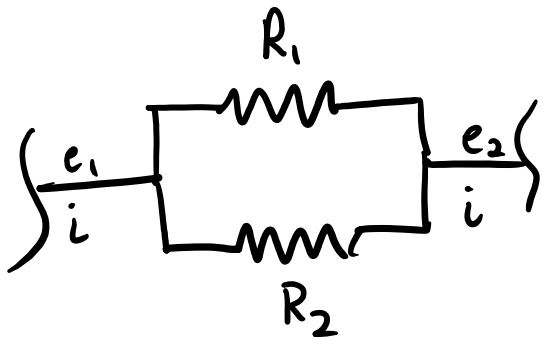
$$-e_2 = -e_1 + e_3$$



simplified

Parallel and Series Circuits

R: R₁



$R: ?$

