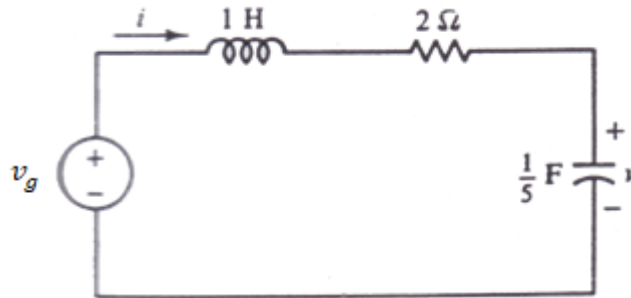


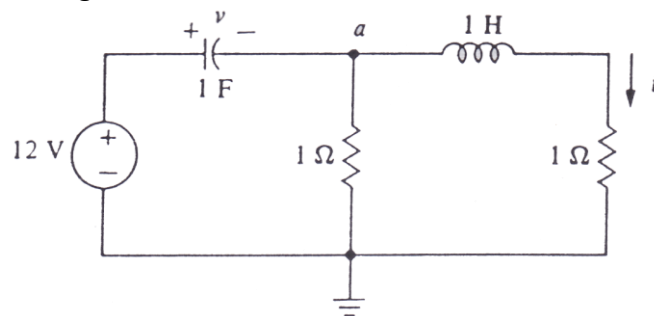
LATIHAN SOAL-SOAL PEMODELAN RANGKAIAN LISTRIK

1. Find i for $t > 0$ using the transformed circuit method if $v(0) = 6\text{ V}$, $i(0) = 2\text{ A}$, and $v_g = 10\text{ V}$



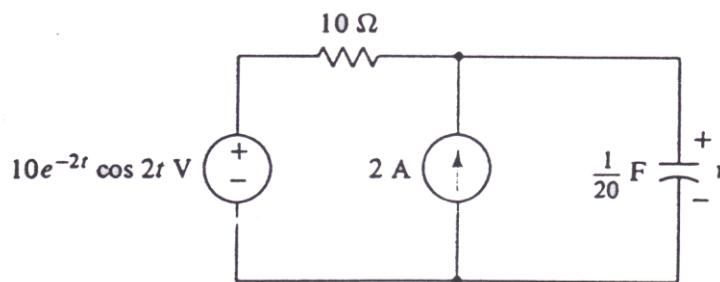
Answer : $e^{-t}(2 \cos 2t + \sin 2t)\text{ A}$

2. Find v for $t > 0$ using the transformed circuit method if $v(0) = 4\text{ V}$ and $i(0) = 2\text{ A}$.



Answer : $12 - e^{-t}(8 \cos t - 2 \sin t)\text{ V}$

3. Find v for $t > 0$ using the transformed circuit method if $v(0) = 10\text{ V}$.



Answer : $10(2 - e^{-2t} + e^{-2t} \sin 2t)\text{ V}$