Choose reference node which have the most node

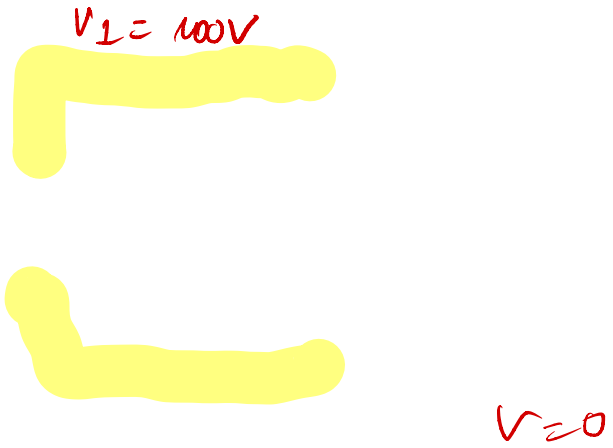
$$v_1\left(\frac{1}{60}+\frac{1}{15}+\frac{1}{5}\right)+v_2\left(\frac{-1}{5}\right)=15$$

$$v_1\left(\frac{-1}{5}\right)+\qquad v_2\left(\frac{1}{5}+\frac{1}{2}\right)=-5$$

$$\Rightarrow\begin{cases} v_1=60 \\ v_2=10 \end{cases}$$

Choose reference node which include 2 sources (or more)
=> Easier

$$i_1 = \frac{100 - v_1}{2}$$


$V_1 = 100V$
$V=0$

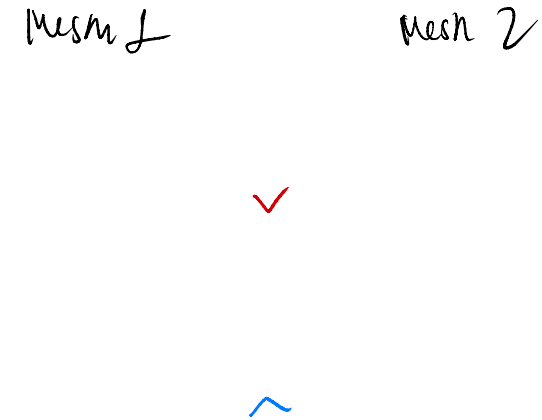

V=80

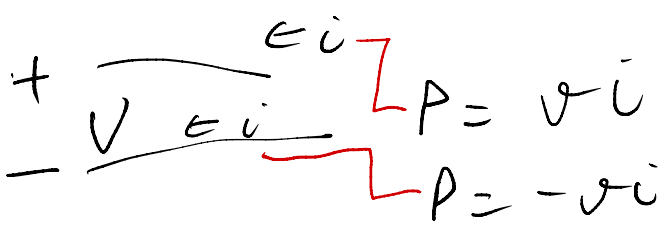
?

00

$$\begin{cases} v_0\left(\frac{1}{10}+\frac{1}{40}+\frac{1}{20}\right)+v_\delta=1 \\ v_0\left(-\frac{1}{10}\right)+v_\delta\left(\frac{20}{40}\right)=-\frac{4}{3} \end{cases}$$

Smallest loop





∧ ia

⇒ P = − vi = −400 W

⇒ Don't need conclusion

parameter

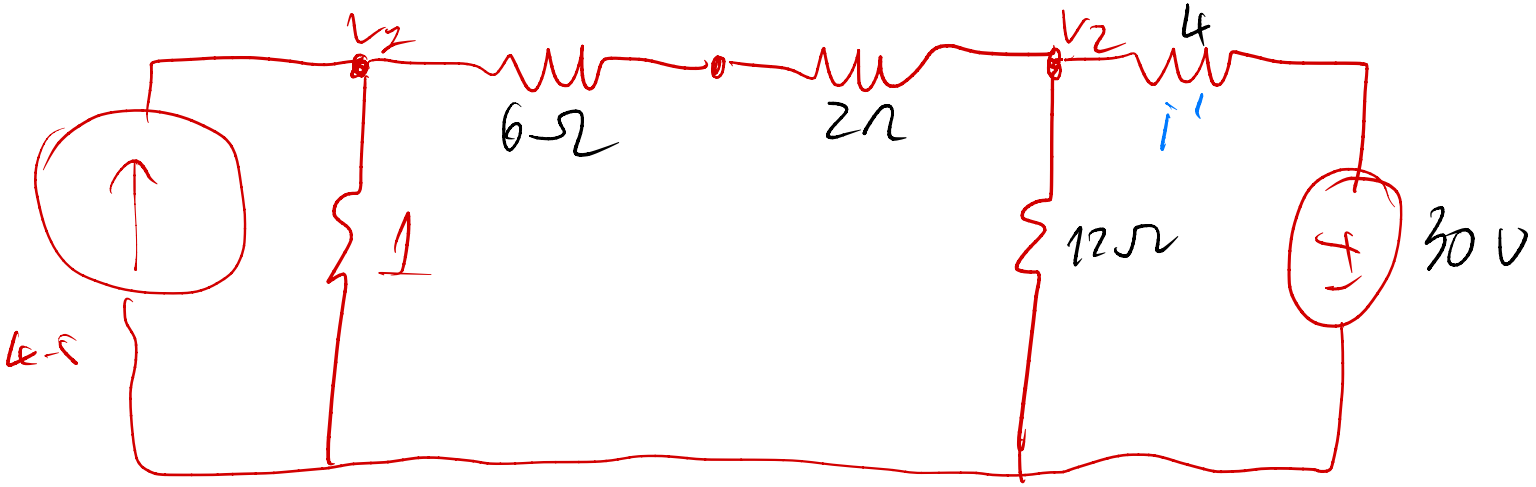
$i_c = -16\ A$

$2C(i_a - i_0)^2$

i = current source

$= i_c$

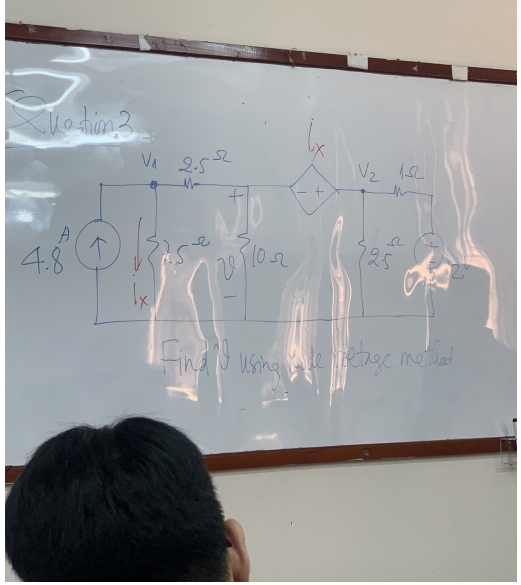
$$v_o = -v_b \times \hat{z} \cdot \sqrt{}$$



$$P_{4.5\,A} = -6(4.5\,A)\angle 0$$

$$i' = \frac{V_2 - 30}{4} = \angle 0$$

$$P_{30V} = +i' \times 30\angle 0$$



$$i_x = \frac{V_2 - V}{7.5} = \frac{V_1}{7.5}$$

Question 4:

$$i_c = 5 i_\phi$$

Mesh A: $-25 + 6(i_a - i_b) + 8(i_a - 5 i_\phi)$

Mesh B: $2 v_b + 8(i_b - 5 i_\phi) + 6(i_b - i_a)$

$$i_\phi = i_a$$