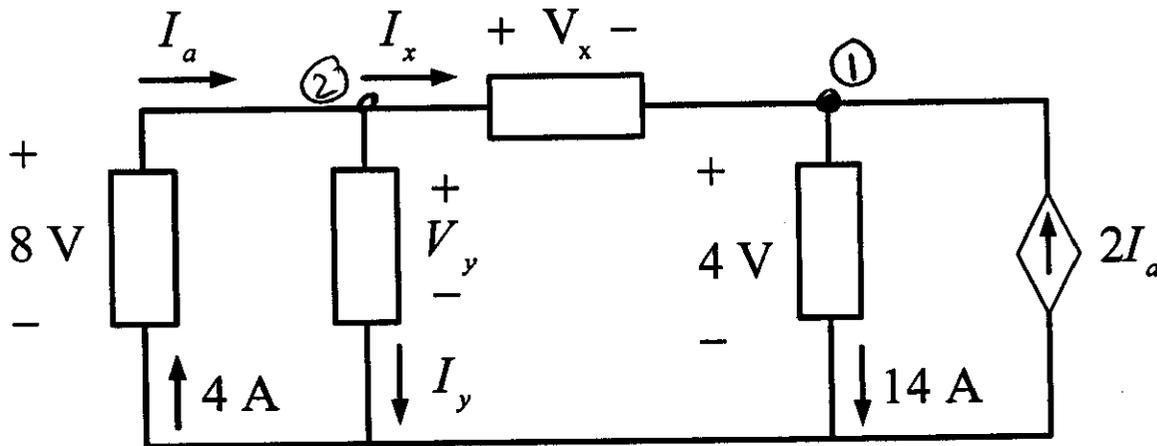


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For the circuit shown above find the followings :

- (a) I_x ?
 (b) V_x ?
 (c) I_y ?
 (d) V_y ?
 (e) The power absorbed by the dependent source ?

(a) KCL at ① $I_x + 2I_a = 14$
 $I_a = 4A \Rightarrow I_x = 14 - 2I_a = \boxed{6A}$

(b) KVL $-8 + V_x + 4 = 0 \Rightarrow \boxed{V_x = 4V}$

(c) KCL at ② $I_a = I_y + I_x \Rightarrow I_y = I_a - I_x$
 $I_y = 4 - 6 = \boxed{-2A}$

(d) $\boxed{V_y = 8V}$

(e) $P_{\text{absorb dependent source}} = -(4)(2I_a) = -4(2)(4) = \boxed{-32W}$
 \Rightarrow deliver