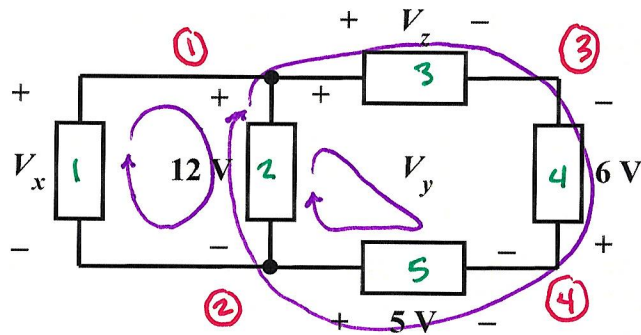


EE 2240
Homework Problem #003

For the circuit shown below:



a. How many nodes does the circuit have?

4

b. How many branches (components) make up the circuit?

5

c. Determine the value of V_x .

$$-V_x + 12V = 0 \Rightarrow V_x = 12V$$

d. Determine the value of V_y .

$$-12V + V_y - 5V = 0 \Rightarrow V_y = 17V$$

e. Determine the value of V_z .

$$V_z - 6V - 5V - 12V = 0 \Rightarrow V_z = 23V$$