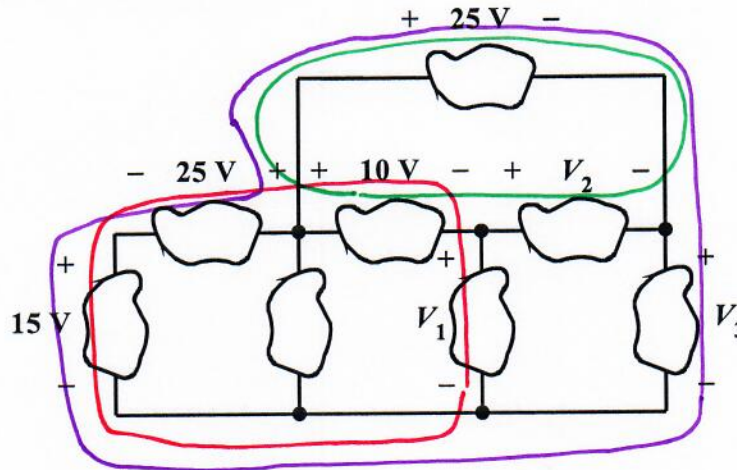


Homework Problem #003

Determine the specified voltages in each circuit.

a. Find V_1 , V_2 and V_3 .



$$-15V - 25V + 10V + V_1 = 0$$

$$\Rightarrow V_1 = 30V$$

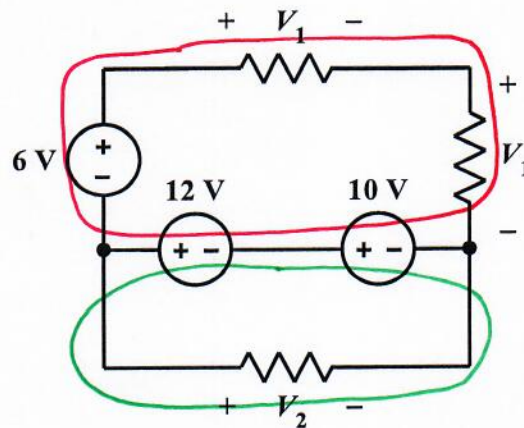
$$+25V - V_2 - 10V = 0$$

$$\Rightarrow V_2 = 15V$$

$$-15V - 25V + 25V + V_3 = 0$$

$$\Rightarrow V_3 = 15V$$

b. Find V_1 and V_2 .



$$-6V + V_1 + V_1 - 10V - 12V = 0$$

$$\Rightarrow V_1 = 14V$$

$$+12V + 10V - V_2 = 0$$

$$\Rightarrow V_2 = 22V$$