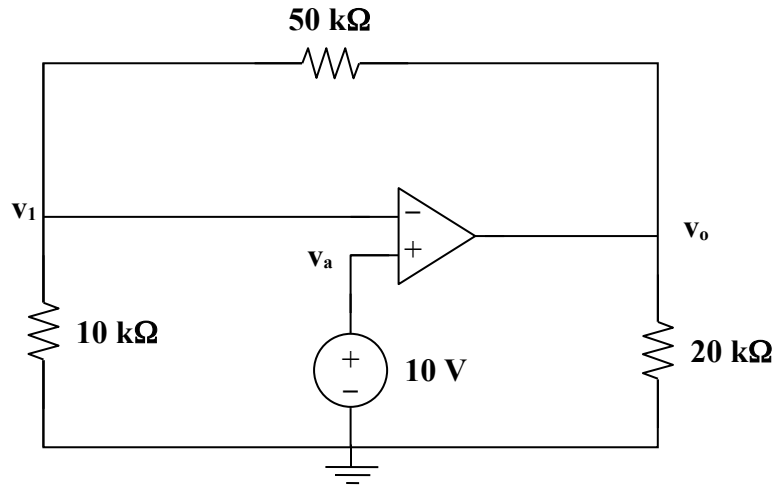


**Chapter 5, Solution 28.**



At node 1,  $\frac{0 - v_1}{10\text{k}} = \frac{v_1 - v_o}{50\text{k}}$

But  $v_1 = 10\text{V}$ ,

$$-5v_1 = v_1 - v_o, \text{ leads to } v_o = 6v_1 = \mathbf{60\text{V}}$$

Alternatively, viewed as a noninverting amplifier,

$$v_o = (1 + (50/10)) (10\text{V}) = \mathbf{60\text{V}}$$

$$i_o = v_o/(20\text{k}) = 60/(20\text{k}) = \mathbf{3\text{ mA}}.$$