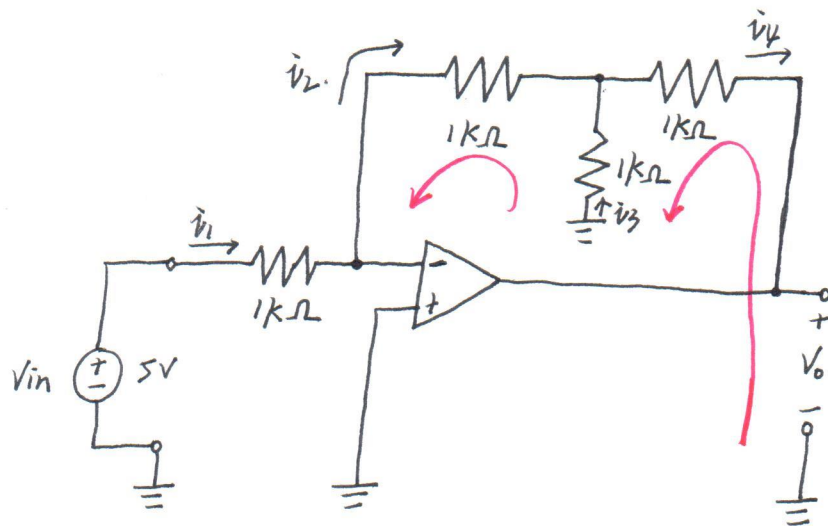


4.2
(2)



First, we verify that negative feedback is present.

According to the summing-point constraint:

$$i_1 = \frac{V_{in}}{1k\Omega} = \frac{5V}{1k\Omega} = 5mA$$

$$i_2 = i_1 = 5mA$$

KVL:

$$i_2 \times 1k\Omega = i_3 \times 1k\Omega$$

$$\therefore i_3 = i_2 = 5mA$$

KCL:

$$i_4 = i_2 + i_3 = (5 + 5)mA = 10mA$$

KVL:

$$V_o = -i_4 \times 1k\Omega - i_3 \times 1k\Omega = -15V$$