

Chapter 5, Solution 66.

We can start by looking at the contributions to v_o from each of the sources and the fact that each of them go through inverting amplifiers.

The 6 V source contributes $-(100\text{k}/25\text{k})6$; the 4 V source contributes $-(40\text{k}/20\text{k})[-(100\text{k}/20\text{k})4]$; and the 2 V source contributes $-(100\text{k}/10\text{k})2$ or

$$\begin{aligned}v_o &= \frac{-100}{25}(6) - \frac{40}{20}\left(-\frac{100}{20}\right)(4) - \frac{100}{10}(2) \\&= -24 + 40 - 20 = \mathbf{-4V}\end{aligned}$$