

**Chapter 5, Solution 69.**

In this case, the first stage is a summer

$$v_a = -\frac{15}{5}(15) - \frac{15}{10}v_o = -45 - 1.5v_o$$

For the second stage,

$$v_o = \left(1 + \frac{6}{2}\right)v_a = 4v_a = 4(-45 - 1.5v_o)$$

$$7v_o = -180 \quad v_o = -\frac{180}{7} = \mathbf{-25.71 \text{ mV.}}$$