Special Problem 2.3-4

In the circuit below, an amplifier with $A_v = -4.0$ and $R_i = 1\, \text{K}$ is followed by an inverting amplifier.

The output of the second amplifier is related to the input of the first amplifier as:

$$v_o = 12.0 \, v_i$$

Determine the output resistance $R_o$ of the first amplifier.