## Special Problem 2.3-4

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

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

$$
v_{\text {out }}=12.0 v_{\text {in }}
$$

$R_{2}=9 \mathrm{~K}$


Determine the output resistance $R_{\text {out }}$ of the first amplifier.

