Special Problem 4.3-3

Assume that the MOSFET in the circuit below is in triode mode.

The current through resistor $R_1$ is 1mA.

Find the value of resistor $R$.

- $R_2 = 5\, \text{K}$
- $R_1 = 7\, \text{K}$
- $1\, \text{mA}$
- $11.0\, \text{V}$
- $-10.0\, \text{V}$
- $K = 1.0\, \text{mA/V}^2$
- $V_t = -2.0\, \text{V}$