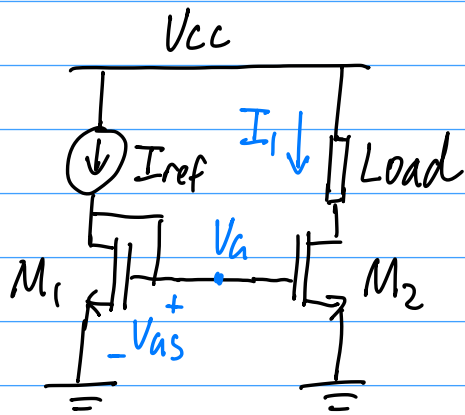


MOSFET current mirror



Assume matching transistors.

$$\text{At } M_1: I_{\text{ref}} = K (V_{\text{as}} - V_{\text{TH}})^2$$

$$\text{At } M_2: I_1 = K (V_{\text{as}} - V_{\text{TH}})^2$$

By the assumption of matched transistors, the RHS expressions are equal.

$$\therefore I_{\text{ref}} = I_1$$