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ChN - em

$$I_D \approx I_S$$

$$V_{DD} = \overline{I_D \cdot R_D} + V_{DS} + \overline{I_D \cdot R_S}$$

$$I_D(R_D + R_S) = V_{DD} - V_{DS}$$

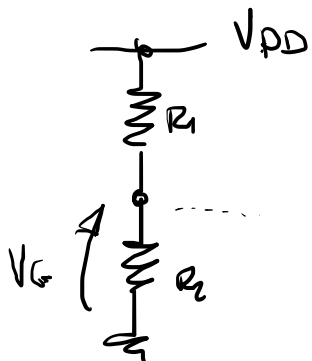
$$R_s + R_o = \frac{V_{PD} - V_{PS}}{I_D}$$

$$V_{PS} = V_D - V_S$$

$$R_S \approx \frac{V_S}{I_D}$$

$$R_D = \frac{V_{DD} - V_D}{I_D}$$

$$\underline{V_{GS} = V_G - V_S} \quad \approx \quad \underline{V_G - R_S \cdot I_D} \quad \rightsquigarrow \quad \underline{V_G = V_{GS} + R_S \cdot I_D}$$



$$I = \frac{V_{AD}}{R_1 + R_2}$$

$$\underline{V_G} = i \cdot R_2 = \frac{V_{DD}}{R_1 + R_2} \cdot R_2$$