

## Essentials of MOSFETs

### Lecture 4.5: Transmission Theory of the MOSFET

#### Short Problem

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The apparent mobility can be extracted from measured IV characteristics, and the ballistic mobility can be readily computed. From the two, we can deduce the transmission in the linear region.

1) Show that the following is true:

$$\frac{\mu_{app}}{\mu_B} = \mathcal{T}_{LIN}$$