

## 4.6 Small-Signal Operation and Models

**Reading Assignment:** *pp. 287-294*

Recall the **small-signal analysis** we performed on a BJT.

We can do a similar analysis on MOSFET amplifiers in order to determine their **small-signal gain** !

Remember there were essentially **three** steps:

1. Determine the small-signal device equation(s).

**HO: Small-Signal Response of MOSFET Circuits**

**HO: Small-Signal Output Resistance**

2. From the small-circuit device equations, determine a small-signal model.

**HO: The MOSFET Small-Signal Model**

3. Use the small-signal model to perform a small-signal analysis.

HO: Steps for Small-Signal Analysis

Example: A Small-Signal Analysis of a MOSFET Amp

Example: Another Small-Signal Analysis of a MOSFET Amp