

## Homework for Chapter 5: Field-Effect Transistors

1. Which one of following might a FET work better than a bipolar in?
  - a. A rectifier
  - b. A radio receiver
  - c. A filter
  - d. A transformerExplain why.
2. What is the definition of transconductance?
3. What is the pinchoff?
4. What is an advantage of MOSFETs over JFETs?
5. What is a difference between depletion- and enhancement-mode MOSFET?
6. How do you describe thyristors?
7. Explain about the integrated circuit by using the following words, “capacitors”, “amplifier”, “linear”, and “digital.” (Underline or box those words in your answer.)
8. Pick out one example of microcontroller from a web page or a book. Draw the block diagram or similar one, and explain it with a couple of sentences.