

Identify Feedback Systems

1. Read class handout.
2. Look for feedback systems around your house, school and where you work. Think about the subsystems within your computer, your car, and your entertainment equipment. Think back to previous classes or jobs and try to identify feedback systems that were used to stabilize systems. (You don't need to write anything down here, you'll do that in the next problem.)
3. Identify at least 2 different feedback systems found around your house, school and where you work. For each of these systems:
 - a) Draw a system diagram, identifying each of the parts (controller, plant, feedback sensor, and possibly others). If you're not sure how the system works or how individual parts of the system work, make educated guesses— think how you would make such a system work.
 - b) Identify the input on the drawing (may be zero).
 - c) Identify the output.
 - d) Identify the feedback signal.
 - e) What would happen if this system did not respond accurately to the control?
 - f) What would happen if this system responded to the control with overshoot or ringing?
4. Repeat problem 3 for a feedback system outside of your normal environment or for a natural feedback system, that is, not made by man. (just one)