

Frequently Asked Questions About the Final

- What is the difference between $H(t)$ and $h(t)$?
 - $H(t)$ is defined and periodic on $[0, \infty)$. Its definition involves an infinite series. Maple can't do things like plot it or use it as a forcing function. $h(t)$ only has to agree with $H(t)$ on $[0, 10\pi)$. Maple can work with it, but $h(t)$ is not periodic and doesn't agree with $H(t)$ after some time t_0 (probably $10 * \pi$).
- My plot of the numerical solution only shows the axes and not the solution.
 - Depending on how you defined $h(t)$ (there are a number of correct ways), **dsolve(...,numeric)** may have a problem because $h(t)$ is discontinuous at 0, where the initial conditions are given. You can take care of this by changing the initial condition to be given at 0.001. (This has hardly any effect on the solution.)
- Will you have office hours Tuesday?
 - I won't know until the last minute. I am scheduled to be a docent at the Witness and Legacy exhibit at 10 tomorrow morning. If I am done in time, I will have office hours late in the morning. I have a committee meeting at 12:15, which I hadn't expected two months ago when I signed up to be a docent in the morning. I don't know how long the meeting will last. If possible, I will have office hours right after the meeting, but I have to leave at 2:30. I will post an announcement on the home page for the course if I am able to have office hours either time.
In any case, I do expect to have time to check email messages which I receive by noon Tuesday and respond to them from my office. While I also check email from home, I may not be able to load a Maple worksheet.
- Can I turn in the bonus question later in the week?
 - No, it is due at the time of the exam. You had two weekends and two study days to see the exhibit, so if you planned ahead, that's plenty of time.