

**Math 307 I, Spring 2012**  
**Extra Credit Problem #1**

*This problem is due any time before the first midterm, which is on April 18th. Partial solutions will still be awarded points. I want you to explain all your reasoning, and show me how far you could get.*

*You must make some assumptions to solve this problem, and I want you to state what assumptions you are using and why. You'll need to use Newton's Law of Cooling, which is described in Problem #16 in Section 2.3. I encourage you to ask me for hints.*

I just bought coffee, and have a (non-dairy) creamer to stir into it. For some reason, I won't be able to drink the coffee for 15 minutes. At that time, I want my coffee as hot as possible. Should I stir in the creamer now, or later? If later, then when?