## List of past exams

Please note: some problems involving the heat equation need you to know what the steady state solution is (from last week's homework).

If you have limited time, you should go over the exams below in the order they are listed. Also you should focus on the topics you are struggling the most.

You should also go over the midterms and see what you did wrong; solutions can be found on Brighspace, under announcements.

1. https://weeklyjoys.files.wordpress.com/2013/01/ma303_fn_fa2009_ sample.pdf
(except: Problems 1, 2, 8, 11, 12, 23, 24)
Answers: 3A, 4B, 5B, 6B, 7A, 9C, 10B and D, 13C, 14C,15E, 16B, 17E, 18A, 19B, 20C, $21 \mathrm{~A}, 22 \mathrm{C}, 25 \mathrm{E}$ (In 25 , the middle line of $(\dagger)$ should not be there, or $f(x)$ should be $v(x)$, as this is a steady state solution which is constant in time.)
2. https://weeklyjoys.files.wordpress.com/2013/01/ma303_fn_fa2013_ ans.pdf
(except Problems 1, 8, 11, 13, 14, 16, 20).
We haven't seem a problem exactly like Problem 15 but it is cute and you know all you need to in order to solve it, in case you would like to challenge yourself)
3. https://weeklyjoys.files.wordpress.com/2013/01/ma303_fn_sp2012__ sol.pdf
(Except: Problems 2 (Series), 3, 5, 8 (Improved Euler), 9, 11)
4. https://weeklyjoys.files.wordpress.com/2013/01/ma303_fn_fa1997__ alt.pdf
(except: Problem 6, Problem II).
(Side note: this exam is from 1997, and tape players were explicitly prohibited; you can bring one to the exam if you want to impress me)
5. https://weeklyjoys.files.wordpress.com/2013/01/ma303_fn_fa2010_ sample.pdf
(except: Problems 1, 3b, 4)
