

Math 23 Diff Eq: Homework 3

due Wed Oct 17 ... but best if do relevant questions after each lecture

No computers needed this week—just your brains and pencils! Remember that since the grader & I know you have an answer in the back of the book, we are looking for brief but clear explanations, and understanding. Remember also HW is a time for you to practise—treat it as you would a practise session for a language, sport, or musical instrument.

3.1: 8,

11,

23.

3.2: 4,

9 (be sure to give $p(t)$, $q(t)$ and $g(t)$),

26,

28.

3.3: 4,

17,

24 (please explain carefully).

3.4: 5 (hint: take log),

6,

10,

18,

27,

33 (again, a proof so explain as clearly and simply as you can),

38 (make sure you can use chain rule by checking 34 ab),

39.