

Show all your work! This is a take-home quiz, with the questions below coming from the homework in Sections 3.1, 3.2 and the handout on linear operators and Cramer's Rule. Your solutions are due on Canvas by 11:59PM on Friday, Feb 17.

1. Section 3.1, #10
2. Section 3.1, #18
3. If we define $L(y) = y'' + t^2y' + 2y$, then show that L is a linear operator (using the definition).
4. Section 3.2, #7
5. Section 3.2, #18