## **Exam 2 Reflection**

Reflecting on my learning. I would say there are three areas I have increased either my knowledge base or improved my reasoning. I believe I have increased my comfort with matrix operations and understanding. I believe I have gained some insight into what I imagine graduate-level work may look like. Lastly, I think my mathematical reasoning has improved because of the work in this class. I have grown and gained from being here.

When it comes to my work with matrices and utilizing matrix algebra, I have grown. I took my initial matrix understanding class during covid as an async class (as it conflicted with the core curriculum). This resulted in less than maximum focus. I would skim video lectures and pass quizzes. The knowledge gave me fundamentals but ultimately left me lacking in the work in this class. I spent time this semester really refining and widening my understanding of matrix algebra and operations. I am happy to fill this known knowledge gap, and potentially investigate further.

This class has opened me up to a few key new ideas when it comes to academic study. As a senior experience, I realize the class was going to be more group-focused and learning driven. This has absolutely been the case. A novel concept never before broached was the literal action of emailing the writer of a textbook. Let alone the concept of an errata to discover all the mistakes. This was illuminating and honestly empowering. To feel like we are competent enough to find mistakes and really address those even while learning new concepts. This felt like a victory and what I imagine involved graduate-level work is like.

My math reasoning has been refined through this course. We ask questions of the book of the proofs and of the theories constantly. Before I may debate whether I had the tools or resources to definitively come to results. Now I feel like with every problem posed I need to tackle, tools or not with reasoning I can come to conclusions or I can try and learn continually. This has been ratified by pursuits with matrix logic and all the gaps I have filled and tried to champion. It has been a captivating course.

I like a challenge and this course has had those challenges, I've had to fill my own knowledge gaps, learned to trust myself more, and improved my personal reasoning. Keep the challenges comming the man in the arena is always ready!