## Modeling:

- Question: Our modeling question was how effective do masks need to be to cut the peak number of infected persons by 50%? It was a prediction question, as we were predicting what mask effectiveness would be required to meet our goal.
- Abstraction: One important abstraction we made to make our model was assuming that everyone was wearing the same type of mask. In reality every person might not be wearing the same type of mask or even a mask at all. However, making this assumption makes it much easier to answer our modeling question, as we don't have to account for multiple mask types, meaning we don't have to create any new stocks. The addition of more stocks would also make it more difficult to verify our model, as there would be more factors to take into consideration. Making this abstraction also makes sense for our modeling question, considering we're not testing which type of mask can meet our goal, just how effective the mask needs to be in order to reach it. We can just do later research to see which masks meet the effectivity percentage we find.

## Teaming:

- Conflict/disagreement: One conflict that happened during the project happened towards the end. The night the project was due me and my partner planned to meet up and go over it before submitting. Both me and my partner went out that day, but she ended up getting back way later than she said, causing me to accidentally sleep through the time we said we were going to meet. When I woke up I apologized for sleeping through our meeting time and she apologized for coming back so late. While I was asleep she went to office hours and submitted the project, which I was grateful for. We decided to reschedule our meet up to breakfast the next day to go over our Powerpoint. I feel like the entire conflict could have been avoided if we just communicated better. Both me and her went out in the afternoon so we could have met up in the morning instead to make things easier. We also scheduled our meet up at the last minute, when it would have been smarter to have done it a day or two in advance.
- Success: Me and my partner were very good at dividing up work based on our strengths and communicating our thoughts and ideas in addition to our work on the project. She was more comfortable with MATLAB while I have a Microsoft Office Specialist certification, so she was in charge of the code while I was in charge of stuff done in Office, like the research synthesis matrix and powerpoint. We still went over each other's work and contributed ideas as well. This led to both of us having a better understanding of the project as a whole and being able to improve on our individual parts.

## Learning:

• Looking back: The learning goals I had at the start of this project were to become more familiar with the modeling process, especially MATLAB, and to work towards being the best partner I could through communicating with my partner and contributing to the team. While I did not do most of the MATLAB work, seeing my partner work and listening to her explain what she was doing deepened my understanding of MATLAB and better helped me to understand how to properly graph a model, something I had struggled with before. I also think I have learned lessons about communicating and working to your strengths during this project, specifically by having us work through our conflicts and how we

- structured our work. I feel this has contributed to my goal of working towards being the best partner possible.
- Looking forward: For the next project, I hope to become more comfortable with implementing verification and validation into my models, as well as improve my research skills and my research synthesis matrices.