**P40**

These are the results of our simulation.

**P41**

N/A.

**P42**

N/A.

**P43**

This is a comparison between different methods. We can see that **Steffen Sub-Perfect performs the best overall** with **Steffen Perfect following**, and back-to-front, windle-to-aisle following; it is evident that the **random method** even outweighs the **front-to-back method**.

**P44**

We need to conduct a sensitivity analysis on our model, but how? We use **compliancy index** to measure in figure. It shows the **predictability of changes** in the model, and the function to compare with is a relationship proved by facts.

**P45**

Case one of our Sensitivity Analysis is a **longer stowing time**. We use a random model – **sigmoid model**, as shown in the slides – to **distribute** the dicompliance of passengers in a relatively realistic method. We choose the sigmoid model due to its speciality in its functions and value, as shown in the figure to the right.

**P46**

These are how we determine whether the model is stable or unstable based on how the graph looks.

**P47**

N/A.

**P48**

We can conclude that random boarding is the most sensitive while front-to-back seems not sensitive.

**P49**

Next, we analysed the queue-jumping situation and concluded that both methods are sensitive, meaning queue-jumping significantly impacts total results.

**P50**

Last but not least, we researched the reduction of passengers and found out that random boarding is the most sensitive (see the distribution of points) while back-to-front is not so sensitive.

**P51**

These are the major conclusions drawn from our sensitivity analysis: Random is far more sensitive than front to back, because randomised sequences can result in immeasurable effects. Back-to-front is the best overall because it is the least sensitive and has better time and satisfaction.