COIS 4470H Lab 4 -GPSS 2

Suppose cars arrive at the drive-through lane of a fast-food restaurant with interarrival times of 33 minutes. It takes 31 minutes for the driver of a car to place an order over the intercom (the intercom is a single server). The car then spends 153 seconds moving from the intercom to the pick-up window (another single server). A car spends 32 minutes at the pick-up window while the order is paid for, bagged, and handed over to the driver. The car then leaves.

- Model this system to gather Queue information that applies to cars from the time they arrive to beginning service at the intercom.
- Extend the model of (a) to so that it will additionally gather Queue information that applies to cars from the time they arrive to having been serviced at the intercom.
- Extend the model of (b) to so that it will additionally gather Queue information that applies to cars waiting their turn for service at the window.
- How many cars have less then 20 minutes of total time in system (from arrival to departure)? How many cars have total time in system more than 20 but less then 25?

Simulate for 100 cars. Use the following tables to record your answers:

	Model (a)	Model (b)	Model (c)
Mean delay in queue	0	0	0
Mean number in queue	0	0	0

Total time in system (Model d)	Number of Cars
Less than 20 minutes	0
Between 20 and 25	0
More than 25	100