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Homework 5  
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For problem 5-13, I constructed a model that included 8 schedules for all five clerks, both plate-dedicated clerks (Mary and Kathy), and both license-dedicated clerks (Sue and Jean), as well as team leader Neil. The model includes two separate create modules for the two separate types of customers arriving for plate services and license services at the state license bureau. The arrivals are defined according to the unique exponential and triangular distributions for the plate and license customers. There is a decide module that checks the wait time of the incoming customers and transfers the customer waiting in line for the longest period of time to the team leader, Neil.

For problem 5-14, Kathy is added as a resource to both of the service process as she can serve both plate and license customers. Her schedule is added to the license schedule as well as the plate schedule include the other clerks schedule for 8-hour days.

For problem 5-15, the resource schedules are modified to include the 30-minute lunch breaks for each of the 5 clerks (Mary, Kathy, Sue, Jean, Neil). The total 8 hours are updated to reflect the breaks as well as the rotation of the following order: Mary, Sue, Neil, Kathy, and Jean. The impact in the system time by customer is a reduction to 160 mins.