**P5**

1. Service delay: 2 \* (10 cars)/ (5 cars/minute) = 4 minutes

Travel delay: 150/100 = 1,5 hour = 90 minutes

End-to-end delay: 4 + 90 = 94 minutes

1. Service delay: 2 \* (8 cars)/ (5 cars/minute) = 3.2 minutes

Travel delay: 150/100 = 90 minutes

End-to-end delay: 90 + 3.2 = 93.2 minutes

**P9**

1. The maximum number of users that can be supported simultaneously under circuit switching:

N = 1Gbps/100kbps = 10242 /100 = 10485.76 = 10485 users

1. P(N)