**[Course Number]**

**[Course Name]**

**Participation Exercise: Frequency Determination**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Please answer the questions below.**

*Refer to the single load profile diagram for the 8-9am hour. Assume that the desired vehicle occupancy is 50 passengers and that the (maximum) vehicle capacity is 90 passengers. The total route length is 10 km.*



8am -9am-9am

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1. What is the total area in passenger-km?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What is the volume at the hourly maximum load point? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Based on Option 1 (method 3), what should the frequency be (vehicles/hour)? \_\_\_\_\_\_\_\_\_\_\_

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1. Based on Option 2 (method 3), what should the frequency be (vehicles/hour)? \_\_\_\_\_\_\_\_\_\_\_

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1. Which is larger? Option 1 or 2? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_