**[Course Number]**

**[Course Name]**

**Participation Exercise: Time-Space Diagram**

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

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

**Please answer the questions below.**

*Time-Space diagrams are commonly used to show a schedule graphically. The following diagram is for a bus route that operates between 3 major stops (Metro Center, Hurley Cr & Sawyer St), and it shows the first hour of daily service. Each bus (vehicle) has different shading.*



1. What is the headway operated on this bus route?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Approximately how far apart are Metro Center and Hurley Cr. if the buses travel at 20mph?

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1. What is the scheduled running time from Metro Center to Sawyer St.? What is the scheduled layover time at Sawyer St.? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the half cycle time (running time + layover time)? What is the total cycle time? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The run beginning at 7:20 at Metro Center turned around at Hurley Center. What is this behavior commonly referred to as? Why might this have occurred?

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