# Scheduling Exercise

# Names \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. For the following task set P1 = (3, 4, 4) and P2 = (2, 8, 8) determine the schedulability tests for rate-monotonic scheduling. Provide a task execution timeline using 1 time unit per tick mark.

2. For the task set in #1, provide a task execution timeline using the shortest completion time (SCT) scheduling algorithm. Are these tasks schedulable using SCT? Why or why not? Use 1 time unit per tick mark.

3. For the following task set, determine its schedulability under rate-monotonic scheduling.

P1 = (10, 30, 30), P2 = (8, 20, 20), P3 = (5, 100, 100). Provide a task execution timeline using 10 time units per tick mark.

4. Show a task execution timeline for the task set given in #3, using Earliest Deadline First (EDF) and Least Slack Time (LST) scheduling. Use a scale of 10 time units per tick mark.