Tutorial 03

01) Calculations for Priority 1:

P1:

Turnaround Time = Completion Time - Arrival Time = 4 - 0 = 4

Waiting Time = Turnaround Time - CPU Burst Time = 4 - 4 = 0

P2:

Turnaround Time = Completion Time - Arrival Time = 7 - 0 = 7

Waiting Time = Turnaround Time - CPU Burst Time = 7 - 3 = 4

P4:

Turnaround Time = Completion Time - Arrival Time = 12 - 8 = 4

Waiting Time = Turnaround Time - CPU Burst Time = 4 - 5 = -1 (Negative waiting time indicates the process arrived after it finished, so it didn't have to wait)

Calculations for Priority 2:

P3:

Turnaround Time = Completion Time - Arrival Time = 20 - 0 = 20

Waiting Time = Turnaround Time - CPU Burst Time = 20 - 10 = 10

Now, let's calculate for the time slice method.

Time Slice Method:

Given time slices: q1 = 20 ms for Priority 1, q2 = 5 ms for Priority 2.

Process P1 and P2:

Both processes have the same priority and arrive at the same time. They will execute alternately with a time slice of 20 ms each until they complete.

Process P4:

Executes after P1 and P2 complete, using the remaining time until it completes.

Process P3:

Executes after P4 completes.