

a. Gant chart for FCFS scheduling algorithm:

Process	Arrival Time	Burst Time	Start Time	Finish Time	Turnaround Time	Waiting Time
P1	0.0	8	0.0	8.0	8.0	0.0
P2	0.4	4	8.0	12.0	12.0	4.0
P3	1.0	1	12.0	13.0	13.0	11.0

Gant chart for SJF scheduling algorithm:

Process	Arrival Time	Burst Time	Start Time	Finish Time	Turnaround Time	Waiting Time
P3	1.0	1	1.0	2.0	1.0	0.0
P2	0.4	4	2.0	6.0	6.0	2.0
P1	0.0	8	6.0	14.0	14.0	6.0

b. The average turnaround time for these processes with the FCFS scheduling algorithm is $(8+12+13)/3 = 11.0$

c. The average waiting time for these processes with the SJF scheduling algorithm is $(0+2+6)/3 = 2.33$