Assignment 3
CISC 324
Batuhan Aktan

1) C
2) A
3) B
4) FCFS,

P1 = 8, P2 = 4, P3 = 10, P4 = 7, P5 = 3

P1	P2	P3	P4	P5
8	12	22	29	32

Average wait time = (0+8+12+22+29)/5
= 71/5
= 14.2ms

SJF,

P1 = 8, P2 = 4, P3 = 10, P4 = 7, P5 = 3

P5	P2	P4	P1	P3
3	7	14	22	32

Average wait time = sum of wait times / number of items
= (0+3+7+14+22)/5
= 46/5
= 9.2ms

5) Starvation is when a process is ready to be run but it is waiting for cpu thus becoming blocked. A priority scheduling algorithm can cause a process to wait indefinitely due to the fact that higher priority would always come first. Preemptive priority scheduling algorithm will move the lower priority process out of the way for the higher priority process to take place then if there is a process with the lowest priority and there is a constant stream of higher priority processes coming in that lower priority stream will never get a chance to be run. A way of solving this problem is aging which means that the longer a process waits the higher the priority of that process becomes thus preventing that process from being starved.

6) Ordinary pipes allow two processes to communicate in a producer-consumer fashion thus allowing the producer to write to one end of the pipe (write end) and consumer to

consume that content from the other end (read end). This is a one way communication between the processes.