| Process | Arrival Time | CPU Burst |
|---------|--------------|-----------|
| $P_1$   | 0            | 16        |
| $P_2$   | 6            | 15        |
| $P_3$   | 8            | 17        |
| $P_4$   | 2            | 12        |

① Assume following 7 processes...

② compute average wait time

Ⓐ FCFS process scheduling

$RQ \rightarrow P_1, P_4, P_2, P_3$

$P_1$   $P_4$   $P_2$   $P_3$
0   16   28   43   60

②a  average wait time $(P_1 + P_2 + P_3 + P_4)/4$

$(P_x : t_{end} - t_{arrival} - t_{burst})$

$\frac{1}{4}\left[ (16-0-16) + (43-6-15) + (60-8-17) + (28-2-12) \right]/4$

Ⓑ non-preemptive SSF
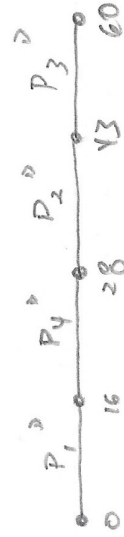
$RQ \rightarrow P_1, P_4, P_2, P_3$

$RQ \rightarrow 0$ incl6 $P_4, P_2, P_3$

$P_1$   $P_4$   $P_2$   $P_3$
0   16   28   43   60

②b

$\left[ (16-0-16) + (43-6-15) + (60-8-17) + (28-2-12) \right]/4$

Ⓒ preemptive SSF

Iteration: 16   12   14   8 12 15   6 12 15 17
$RQ \rightarrow P_1, \rightarrow P_4 P_1, \rightarrow P_4 P_1 P_2 \rightarrow P_4 P_1 P_2 P_3$
Arrival: 0   2   6   8

$P_1$   $P_4$   $P_1$   $P_2$   $P_3$
0   2   14   28   43   60

②c

$\left[ (28-0-16) + (43-6-15) + (60-8-17) + (14-2-12) \right]/4$

CPU Burst

$P_1$ : 16 14 0
$P_2$ : 15
$P_3$ : 17
$P_4$ : 12 8 6 0