

P-3 (Scheduler) :

Round-Robin Scheduler

P - A, B, C

<u>Time</u>	<u>Process</u>
1	A
2	B
3	C
4	A
5	B
6	C
7	A
8	B
9	C
...	n

10

11

# Weighted RR Scheduler:

A - 3 ticks, B - 2 ticks, C - 1 tick

<u>Ticks</u>	<u>Processes</u>
1	A
2	A
3	A
4	B
5	B
6	C
7	A
8	A
9	A
10	B

# Compensated RR schedule

A - 3 ticks, D-2, C-1

Tick

Policy

Sleepy

1

A

2

B

A

3

B

4

C

5

A

6

A

7

A

8

A

9

B

10

B

<u>Time</u>	<u>Process</u>	
1	A	
2	A	
3	A	
4	B	
5	B	
6	C	
7		

→ context switch

sched() → switch(OS, P)

sched() → switch(P, OS)

When is sched() called?

1) Timer Interrupt ✓

trap() → yield → sched()

2) When sleep() is called ✓

→ waiting / blocking

3) When exit is called ✓

When is `sleep()` called?

1. The `sleep()` syscall.
2. `wait()` call.
3. When a process is waiting to read from a pipe. X

`sleep(30)` -  
                    ↑      ↘  
                    channel → keyboard input  
`wakeup(30)`

P-3:

- 1) `setsize` syscall I
- 2) `getsize` syscall I
- 3) `fork()` → `fork2()` II
- 4) `getpinfo` syscall III

psat os  $\rightarrow$  user } —

5) Scheduling policy  $\rightarrow$  Y IV  
complicated RR.

6) Use GDB!