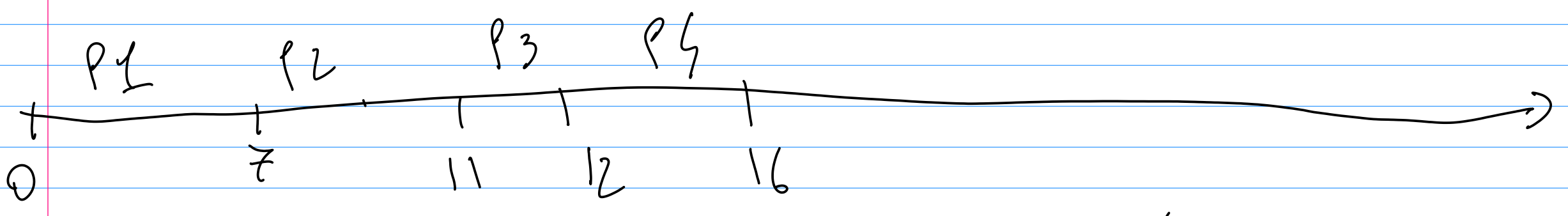


Processo	Arrivo	Durata
P1	0	7
P2	2	4
P3	4	1
P4	5	4

FCFS (coda, senza priorità)

P1 - P2 - P3 - P4



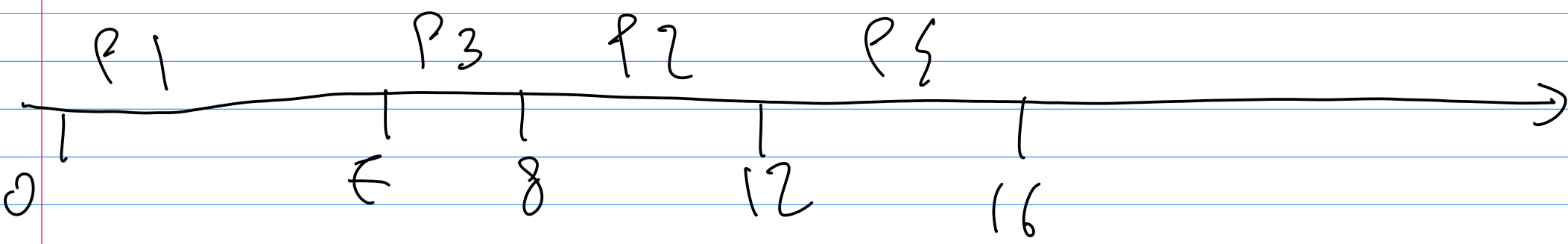
$$t_{m.a.} = (0 + 5 + 7 + 7) / 4 = 4,75$$

$$t_{m.c.} = (7 + 9 + 8 + 11) / 4 = 8,75$$

Processo	Arrivo	Durata
P1	0	7
P2	2	4
P3	4	1
P4	5	4

SJF (priorità, senza priorità)

P1 - P2 - P3 - P4

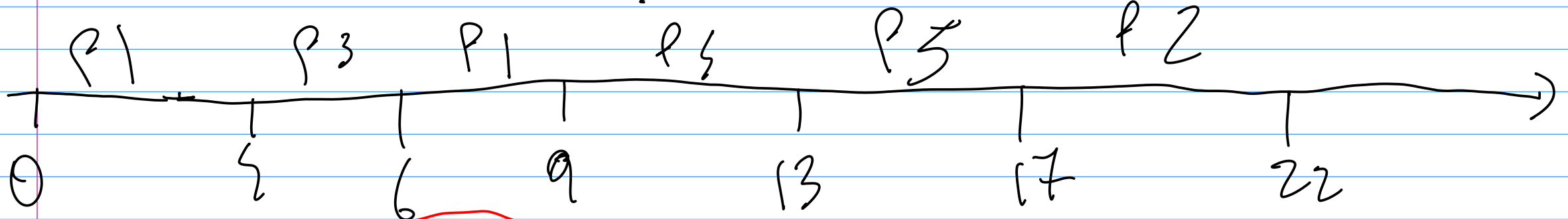
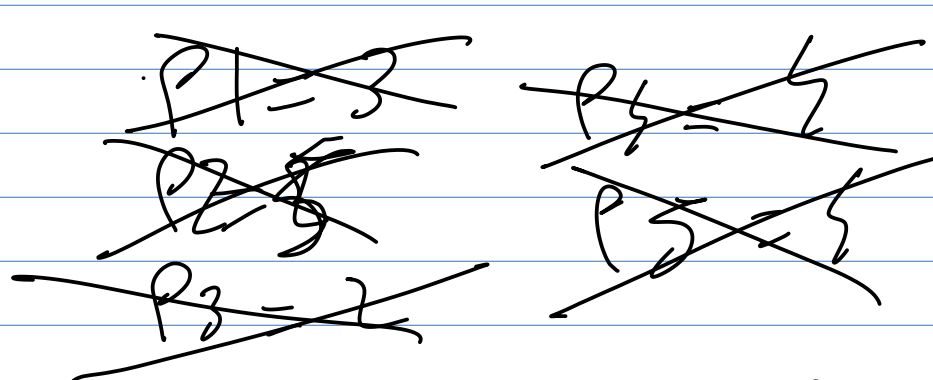


$$t_{m.a.} = (0 + 3 + 6 + 7) / 4 = 4$$

$$t_{m.c.} = (7 + 9 + 10 + 11) / 4 = 8$$

processi	P1	P2	P3	P4	P5
durata	7	5	2	4	4
tempo di arrivo	0	3	4	6	9

SPN = min SJFN = SJF + priorità



$$t_{m.a.} = (0 + 0 + 2 + 3 + 5 + 15) / 5 = 4,6$$

$$t_{m.c.} = (9 + 2 + 7 + 8 + 19) / 5 = 9$$

### Scheduling Round Robin (RR, sistemi interattivi)

Abbiamo i seguenti processi in coda con relativa durata in millisecondi, e quanto di tempo stabilito di 20 ms:

Processi	P1	P2	P3	P4
Durata (millisecondi)	30	15	60	45

(- tutti processi a inizio 0)

Scrive valore.

P1 - P2 - P3 - P4

P1 = 30 P2 = 15

P3 = 60 P4 = 45

P1 = 10ms P2 = 5ms

P3 = 20ms P4 = 25ms

P1 = 0ms P2 = 0ms

P3 = 40ms P4 = 20ms

P1 = 0ms P2 = 0ms

P3 = 20ms P4 = 5ms

P1 = 0ms P2 = 0ms

P3 = 0ms P4 = 0ms

P1 = 0ms P2 = 0ms

P3 = 0ms P4 = 0ms

P1 = 0ms P2 = 0ms

P3 = 0ms P4 = 0ms

P1 = 0ms P2 = 0ms

P3 = 0ms P4 = 0ms

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P3 = 0ms P4 = 0ms

P1 = 0ms P2 = 0ms

P3 = 0ms P4 = 0ms

P1 = 0ms P2 = 0ms

P3 = 0ms P4 = 0ms

P1 = 0ms P2 = 0ms

Dovrebbe no overhead

• q = 30ms

• costo switch = 5ms

Calcolo percentuale di overhead per girare lo switch tra 2 processi

$$\text{Overhead} = \frac{\text{temp switch}}{\text{temp totale (q + temp switch)}} = \frac{5 \text{ ms}}{(30 + 5) \text{ ms}} = \frac{5}{55} =$$

$$= 0,09$$

Abbiamo una percentuale di overhead di 0,09 %