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Exersice

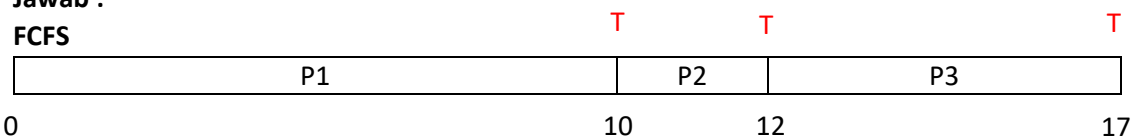
Proses	Brust Time	Priority	Wkt Kedatangan
P1	10	3	0
P2	2	1	3
P3	5	2	4

Gambar Gant Chart dan Tentukan Avg. Waiting Time serta Avg. Turn Arround Time dari ketiga proses di atas dengan algoritma :

- FCFS
- Round-Robin, q = 2
- Round-Robin, q = 5

Jawab :

a. **FCFS**



Waiting Time :

$$P1 = 0 \quad | \quad P2 = 10 - 3 = 7 \quad | \quad P3 = 12 - 4 = 8$$

$$\text{Avg. Waiting Time} : \frac{0+7+8}{3} = 5$$

Turn Around Time :

$$P1 = 10 \quad | \quad P2 = 12 - 3 = 9 \quad | \quad P3 = 17 - 4 = 13$$

$$\text{Avg. Turn Around Time} : \frac{10+9+13}{3} = 10,667$$

b. **Round-Robin, q = 2**

P1	P2	P3	P1	P3	P1	P3	P1	P1
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0 2 4 6 8 10 12 13 15 17

Waiting Time :

$$P1 = 0+2+2+2+1 = 7 \quad | \quad P2 = 2 - 3 = -1 \quad | \quad P3 = 2 + (2 - 4) + 2 + 2 = 4$$

$$\text{Avg. Waiting Time : } \frac{7+(-1)+4}{3} = 3,3$$

Turn Around Time :

$$P1 = 17 \quad | \quad P2 = 4 - 3 = 1 \quad | \quad P3 = 13 - 4 = 9$$

$$\text{Avg. Turn Around Time : } \frac{17+1+9}{3} = 9$$

c. Round-Robin, q = 5

P1	P2	P3	P1
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0 5 7 12 17

Waiting Time :

$$P1 = 0+2+5 = 7 \quad | \quad P2 = 5 - 3 = 2 \quad | \quad P3 = 5 + (2 - 4) = 3$$

$$\text{Avg. Waiting Time : } \frac{7+2+3}{3} = 4$$

Turn Around Time :

$$P1 = 17 \quad | \quad P2 = 7 - 3 = 4 \quad | \quad P3 = 12 - 4 = 8$$

$$\text{Avg. Turn Around Time : } \frac{17+4+8}{3} = 9,667$$