

Ex 4

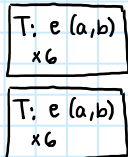
Sunday, January 30, 2022 11:13 AM

④ 2 processors, data partition

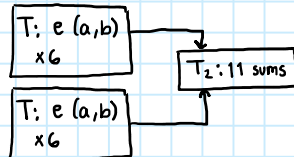
Data: a b c f g v h b c d s b
 1 2
 2 processors → 2 data partitions

T: e(a,b)
x6
 Task T receives 6 letters (1 partition)
 that's why 1 pt "x6" → Task T has 1 basic instruction that is executed in 1 data piece (6 letters) = 6 operations

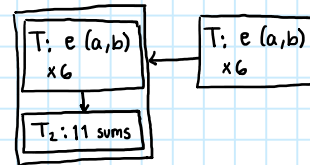
Partitioning



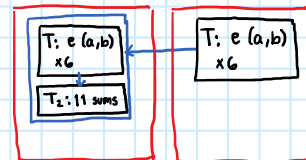
Communication



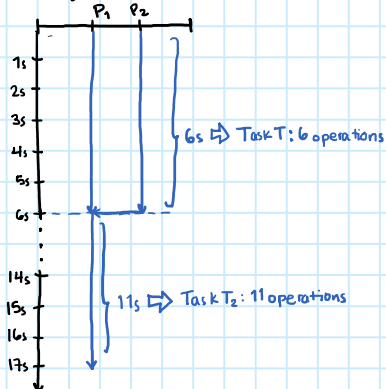
Union



Mapping



Time diagram: Assuming that 1 operation (=, +, -, *, \) takes 1s:



$$t_{TOTAL} = \max\{P_1, P_2\}$$

$$t_{TOTAL} = \max\{17s, 6s\}$$

$$t_{TOTAL} = 17s$$