

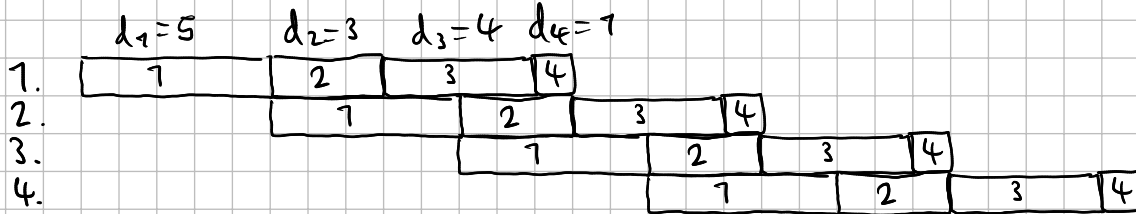
③



$$L = \sum_{i=1}^5 d_i = 4 + 1 + 5 + 3 + 5 = 18, \quad T = 5$$

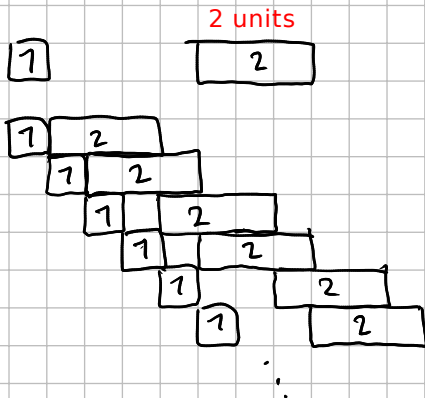
$$D = L + (9 - 1) \cdot T = 18 + 8 \cdot 5 = 58$$

⑨

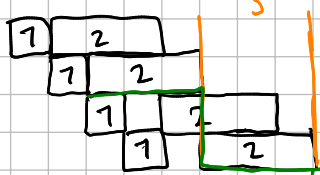


$$\frac{4}{(5+3+4+1) + (4-1) \cdot 5} = \frac{4}{13+15} = \frac{1}{7}$$

⑩



intuitively: every 3 time steps we complete 2 new iter. $\Rightarrow \frac{2}{3}$.



alternative:

consider $\frac{n}{\text{duration}}$ for $n \rightarrow \infty$

n even: $\frac{n}{2 + \frac{n}{2} \cdot 3} = \frac{1}{\frac{2}{n} + \frac{3}{2}} \rightarrow \frac{2}{3}$

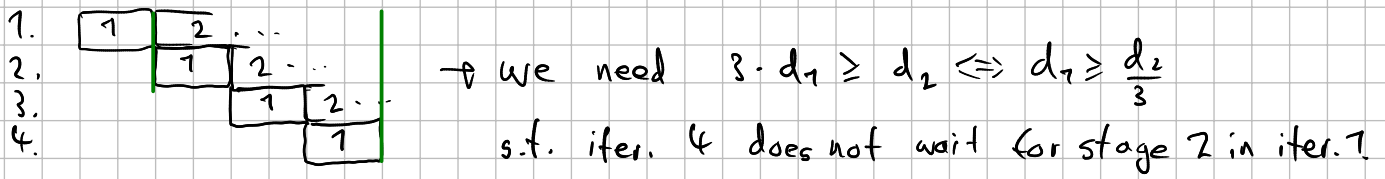
n odd: $\frac{n}{2 + \frac{n-1}{2} \cdot 3 + 2} = \frac{n}{(4 - \frac{3}{2}) + \frac{3}{2} \cdot n} \rightarrow \frac{2}{3}$

12) $d_1 = 1.999$ $d_2 = 6, 3 \text{ units}$

1

2

No ∇



13) $d_1 = 2.1$ $d_2 = 6, 3 \text{ units}$ $d_3 = 2$

1

2

3

- $3d_1 > d_2$

We know this is balanced. Then "intuitively" since $d_1 \geq d_3$ it should remain balanced.