

第七周.

1) 应取 $1\text{ns}, 1.5\text{ ns}, 1\text{ns}, 2\text{ns}, 1.5\text{ ns}$ 的最大值 2ns , 再加 $0.1\text{ns} = 2.1\text{ns}$ 为 T_{clock} .

$$2) S = \frac{T_{pipe}}{T_{old}} \cdot \frac{CPI_{pipe}}{CPI_{old}} = \frac{2.1\text{ ns}}{7\text{ ns}} \times \frac{N+4}{N} \rightarrow 0.3$$

$$3) \text{将它无限级分割 } T_{pipe} = \frac{7}{n} + 0.1 \rightarrow 0.1\text{ ns}, \therefore S_{min} = \frac{1}{70}$$