

1. 1) $T_{\text{pipe}} = t_{\text{MEM}} + t_s = 2.1 \text{ ns}$

2) 加速比 $S = \frac{T_{\text{cycle}}}{T_{\text{pipe}}} = \frac{10}{3}$

3) 如果有无限多个流水级，则时钟周期为 0.1 ns

加速比变为 $S' = \frac{0.1 \text{ ns}}{0.1 \text{ ns}} = 70$