

① 1) 5级流水化后的处理器时钟周期为  $T_{pipe} = 2.1ns$

2) 单周期处理器加速比:  $Senhanced = \frac{T_{cycle}}{T_{pipe}} = \frac{7ns}{2.1ns} \approx 3.33$

3) 级流水化的机器拥有  $n$  个流水级, 则:

$$\lim_{n \rightarrow \infty} Senhanced = \frac{7ns}{0.1ns} = 70$$