第3章

1. 时钟周期 $T_{clk} = max + T_{delay} = 2ns + 0.1ns = 2.1ns$

2. $S = \frac{T_{pipe}}{T_{normal}} \cdot \frac{CPI_{pipe}}{CPI_{normal}} = \frac{2.1}{7} \cdot \frac{N+K-1}{N}$

假设 $N \to \infty$ $S = \frac{2.1}{7} \cdot = \frac{3}{10}$

加速比 $\frac{1}{S} = \frac{10}{3} = 33.3\%$

3. $K \to \infty$ $(T_{pipe})_{min} = 0.1$

$S = \frac{0.1}{7}$

加速比 $\frac{1}{S} = \frac{7}{0.1} = 70$