4.4

(1) $T = 2.1 ns$

(2) $S = \dfrac{T_{old}}{T} = \dfrac{7}{2.1} = 3.33$

(3) 设有 n 级流水线, 则每个阶段时间为 $\dfrac{7}{n} + 0.1$ $n \to \infty$ $T \to 0.1$

∴ $S_{max} = \lim\limits_{n \to \infty} \dfrac{T_{old}}{T} = \dfrac{7}{0.1} = 70$