

$$W(n) \Rightarrow \int_{path} G \otimes p \otimes G \in$$

$$D(n) = | \text{critical path} |$$

$$T_1(n) = W(n)$$

$$T_\infty(n) = D(n)$$

$$1) T_p(n) \geq D(n)$$

$$2) T_p(n) \geq \left\lceil \frac{W(n)}{p} \right\rceil$$

$$\Rightarrow T_p \geq \max \{ D(n), \left\lceil \frac{W(n)}{p} \right\rceil \}$$

$$T_k = \left\lceil \frac{W_k}{p} \right\rceil \Rightarrow T_p = \sum_{k=1}^D \left\lceil \frac{W_k}{p} \right\rceil = \sum_{k=1}^D \left\lfloor \frac{W_k - 1}{p} \right\rfloor + 1$$

$$\Rightarrow T_p(n) \leq \sum_{k=1}^D \frac{W_k - 1}{p} + 1 = \frac{W - D}{p} + \underline{D}$$

