

Liu and Layland (LL) bound		$U_{lub}^{RM} = n(2^{1/n} - 1)$
Hyperbolic (HB) bound		$\prod_{i=1}^n (U_i + 1) \leq 2$
Response Time Analysis		$WR_i = C_i + \sum_{k=1}^{i-1} \left\lceil \frac{WR_i + AJ_k}{T_k} \right\rceil C_k$ $BR_i = C_i + \sum_{k=1}^{i-1} \left(\left\lceil \frac{BR_i - AJ_k}{T_k} \right\rceil - 1 \right)^+ C_k, \quad w^+ = \max(w, 0)$ $R_i = C_i + \sum_{k=1}^{i-1} \left\lceil \frac{R_i}{T_k} \right\rceil C_k$
Processor Demand	schedulability	$g(t_1, t_2) = \sum_{r_i \geq t_1}^{d_i \leq t_2} C_i \quad g(0, L) = \sum_{i=1}^n \left\lfloor \frac{L + T_i - D_i}{T_i} \right\rfloor C_i$ $\forall L \in D, \quad g(0, L) \leq L$ $D = \{d_k d_k \leq \min(H, \max(D_{max}, L^*))\}$ $H = lcm(T_1, \dots, T_n)$ $L^* = \frac{\sum_{i=1}^n (T_i - D_i) U_i}{1 - U}$
Polling Server	schedulability	$U_{lub}^{RM+PS} = U_s + n \left[\left(\frac{2}{U_s + 1} \right)^{1/n} - 1 \right]$ $\prod_{i=1}^n (U_i + 1) \leq \frac{2}{U_s + 1}$
	response time	$R_a = C_a + \Delta_a + F_a(T_s - C_s)$ $\Delta_a = \left\lceil \frac{r_a}{T_s} \right\rceil T_s - r_a \quad F_a = \left\lceil \frac{C_a}{C_s} \right\rceil - 1$
Deferrable Server	schedulability	$U_{lub}^{RM+DS} = U_s + n \left[\left(\frac{U_s + 2}{2U_s + 1} \right)^{1/n} - 1 \right]$ $\prod_{i=1}^n (U_i + 1) \leq \frac{U_s + 2}{2U_s + 1}$
	response time	$R_a = C_a + \Delta_a - C_0 + F_a(T_s - C_s)$ $C_0 = \min(C_s(r_a), \Delta_a)$ $\Delta_a = \left\lceil \frac{r_a}{T_s} \right\rceil T_s - r_a \quad F_a = \left\lceil \frac{C_a - C_0}{C_s} \right\rceil - 1$
NP scheduling	level-i busy period	$L_i^{(s)} = B_i + \sum_{h: P_h \geq P_i} \left\lceil \frac{L_i^{(s-1)}}{T_h} \right\rceil C_h, \quad B_i = \max_{j: P_j < P_i} \{C_j - 1\}$
	response time	$s_{ik}^{(\ell)} = B_i + (k-1)C_i + \sum_{h: P_h > P_i} \left(\left\lceil \frac{s_{ik}^{(\ell-1)}}{T_h} \right\rceil + 1 \right) C_h$ $R_i = \max_{k \in [1, K_i]} \{s_{ik} + C_i - (k-1)T_i\}$
Overloading	Instantaneous load	$\rho_i(t) = \sum_{d_k \leq d_i} c_k(t) / (d_i - t) \quad \rho(t) = \max_i \rho_i(t)$