

STA 4183 – The Theory of Interest

Formulas for Sinking Fund Schedules

Sinking Fund $(i = j)$		Sinking Fund $(i > j)$	
$R_1 \neq \dots \neq R_n$	$R_1 = \dots = R_n$	$R_1 \neq \dots \neq R_n$	$R_1 = \dots = R_n$
$I_t = iL$	$I_t = R_t - R_t \left(\frac{1}{1+i} \right)^n$	$I_t = iL$	$I_t = R_t - \frac{L}{s_{\overline{n} j}}$
$D_t = R_t - I_t$	$D_t = R_t \left(\frac{1}{1+i} \right)^n$	$D_t = R_t - I_t$	$D_t = \frac{L}{s_{\overline{n} j}}$
$B_t = (1+i)B_{t-1} + D_t$	$B_t = R_t s_{\overline{t} i} \left(\frac{1}{1+i} \right)^n$	$B_t = (1+j)B_{t-1} + D_t$	$B_t = \frac{L s_{\overline{t} j}}{s_{\overline{n} j}}$