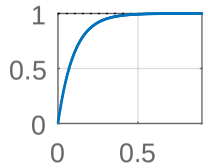
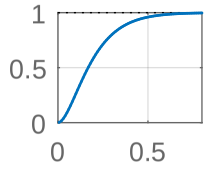
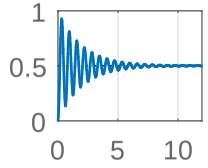
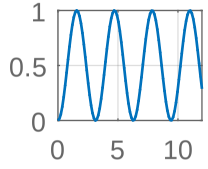
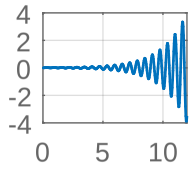
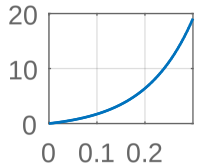
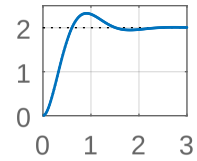
Function	Canonical form	Parameters	Type	Roots	Performance	Graph
$G_0 = \frac{10}{s+10}$	$G_0 = 1 * \frac{10}{s+10}$	$\sigma = 10$	First order	$s = -10$	$t_r = 2.2/10$ $t_s = 4.6/10$	
$G_1 = \frac{100}{(s+10)^2}$	$G_1 = 1 * \frac{10^2}{s^2+2*1*10s+10^2}$	$\omega_n = 10$ $\zeta = 1$ $k = 1$	Second order critically damped	$s = -10$, $s = -10$	N/A	
$G_2 = \frac{50}{s^2+2s+100}$	$G_2 = \frac{1}{2} * \frac{10^2}{s^2+2*\frac{1}{20}*10s+10^2}$	$\omega_n = 10$ $\zeta = \frac{1}{20}$ $k = \frac{1}{2}$	Second order under damped	$s = -0.5 \pm 10j$	$t_r = 2.2/10$ $t_s = 4.2/\frac{1}{2}$	
$G_3 = \frac{10}{s^2+4}$	$G_3 = \frac{10}{4} * \frac{2^2}{s^2+2*0*2s+2^2}$	$\omega_n = 2$ $\zeta = 0$ $k = \frac{10}{4}$	Second order unstable	$s = \pm 2j$	N/A	

$G_4 = \frac{100}{s^2-s+100}$	$G_4 = 1 * \frac{10^2}{s^2+2*\frac{-1}{20}*10s+10^2}$	$\omega_n = 10$ $\zeta = \frac{-1}{20}$ $k = 1$	Second order unstable	$s = 0.5 \pm 10j$	N/A	
$G_5 = \frac{10}{s-10}$	$G_5 = 1 * \frac{10}{s-10}$	$\sigma = -10$	First order unstable	$s = 10$	N/A	
$G_6 = \frac{32}{s^2+4s+16}$	$G_6 = 2 * \frac{4^2}{s^2+2*\frac{1}{2}*4s+4^2}$	$\omega_n = 4$ $\zeta = \frac{1}{2}$ $k = 2$	Second order under damped	$s = -0.5 \pm 3.46j$	$t_r = 2.2/4$ $t_s = 4.2/13$ $k = 2$