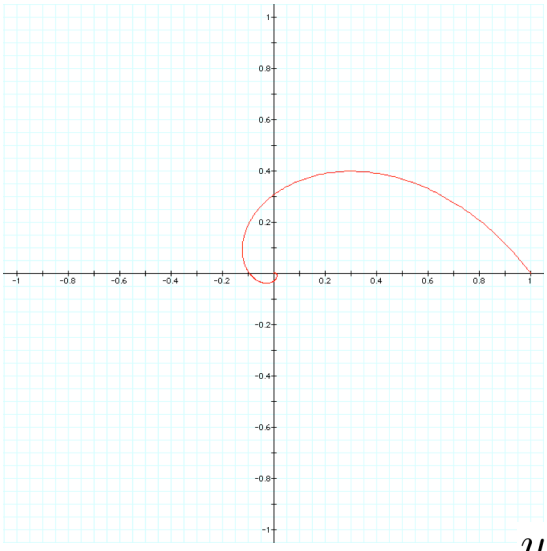
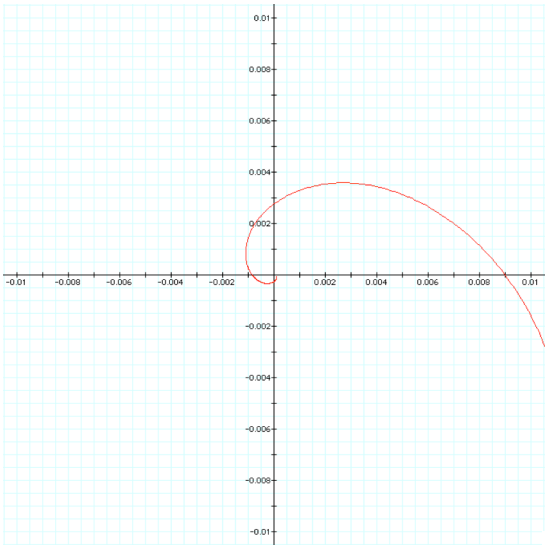
$$x(t) = Re^{-pt}\cos\omega_1 t$$
$$y(t) = Re^{-pt}\sin\omega_1 t$$

$y\,(\mathrm{m})$



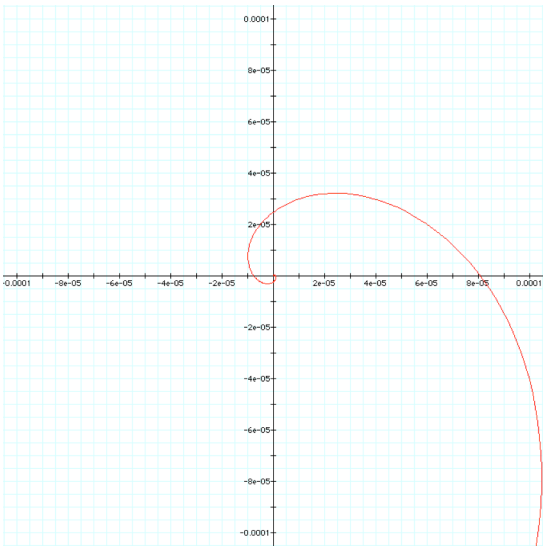
$x\,(\mathrm{m})$

$y\,(\mathrm{m})$



$x\,(\mathrm{m})$

$y\,(\mathrm{m})$



$x\,(\mathrm{m})$

$$R = 1\,\mathrm{m}$$
$$\omega_1 = 12\,\mathrm{s}^{-1}$$
$$p = \beta/2m = 9\,\mathrm{s}^{-1}$$