$\delta := \frac{\pi}{2}$ $\beta := .2$ $\omega_o := 1$ $A := 1$

$x(t) := A \cdot e^{-\beta \cdot t} \cdot \cos\left(t \cdot \sqrt{\omega_o^{\,2} - \beta^2} - \delta\right)$ $SHM(t) := A \cdot \cos\left(t \cdot \omega_o - \delta\right)$

The zeros of *x*(*t*) occur when: $t = \frac{\frac{(2n-1)\pi}{2} - \delta}{\sqrt{\omega_o^{\,2} - \beta^2}}$ $t_0 = 0$ $t_1 = 3.206$ $t_2 = 6.413$ $t_3 = 9.619$ $t_4 = 12.825$

The time between successive maxima or minima $T := \frac{2\pi}{\sqrt{\omega_o^{\,2} - \beta^2}}$ $T = 6.413\ s$

The zeros of *SHM*(*t*) occur when: $t = \frac{\frac{(2n-1)\pi}{2} - \delta}{\omega_o}$ $t'_0 = 0$ $t'_1 = 3.142$ $t'_2 = 6.283$ $t'_3 = 9.425$ $t'_4 = 12.566$