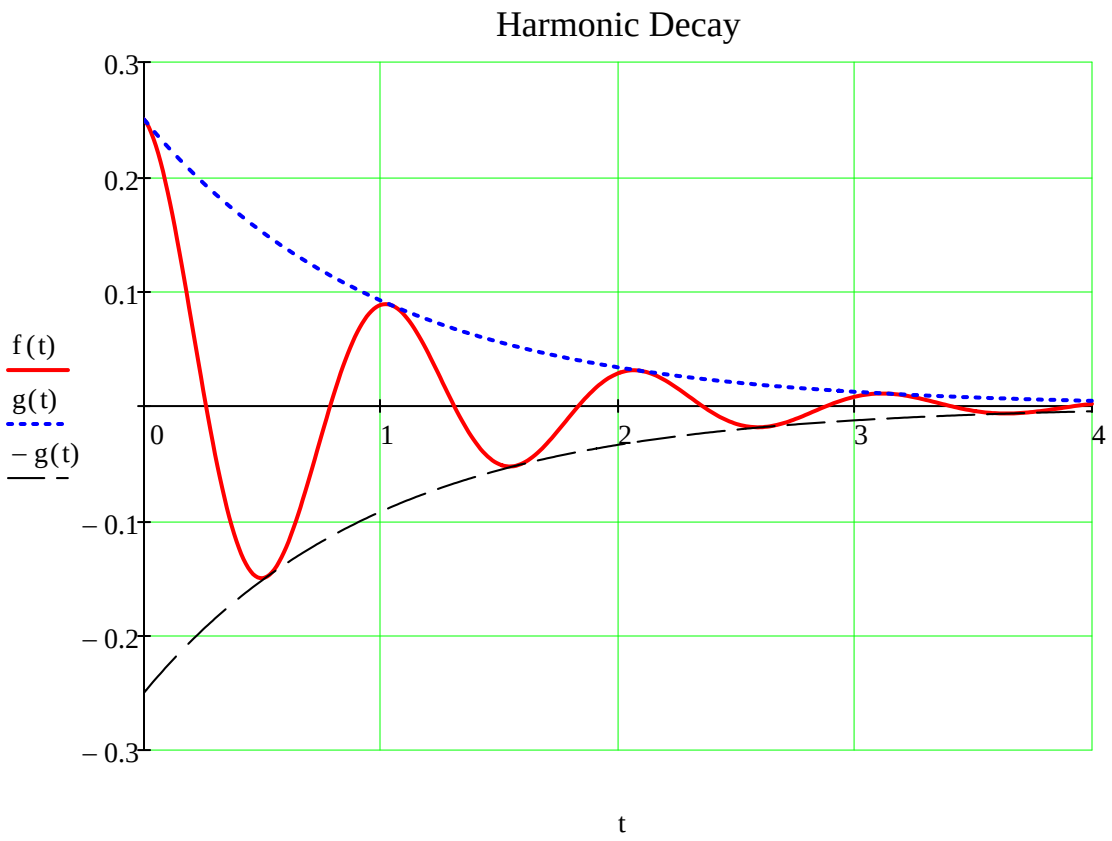
Problem 57

$$f(t) := \frac{1}{4}\cdot e^{-t}\cdot\cos(6\cdot t) \qquad g(t) := \frac{1}{4}\cdot e^{-t} \qquad t := 0, .01 .. 4$$



Problem 58

Some heights as a function of time (t) are shown to the right.

$$f(0) = 0.25$$

$$f\left(\frac{1}{4}\right) = 0.014$$

$$f\left(\frac{1}{2}\right) = -0.15$$

$$f(1) = 0.088$$

$$f(2) = 0.029$$