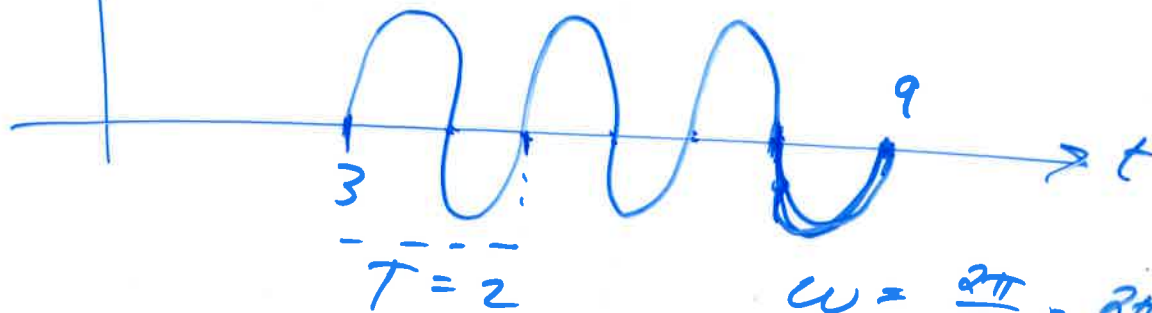


$F(t)$ 

$$F(t) = F_0 \sin(\pi t) \theta(t-3) \theta(9-t)$$



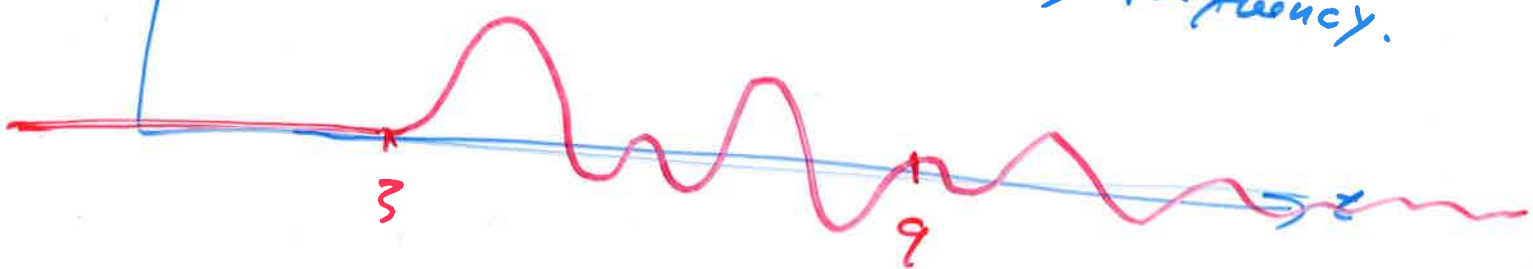
initial cond.

$$x(3) = 0$$

$$v(3) = 0$$

$$\omega = \frac{2\pi}{T} = \frac{2\pi}{2} = \pi$$

↑ driving frequency.

 $x(t)$ 

$$G(t, t') = \theta(t-t') \frac{1}{m\omega_1} e^{-\beta(t-t')} \sin[\omega_1(t-t')]$$

$$x(t) = \int_{t'=-\infty}^{+\infty} F(t') G(t, t') dt'$$

$$= \int_{t'=3}^9 F_0 \sin(\pi t') \theta(t-t') \frac{1}{m\omega_1} e^{-\beta(t-t')} \sin[\omega_1(t-t')] dt'$$