ECE250: Signals and Systems
Quiz5

1. [CO2] Consider a continuous-time LTI system whose frequency response is

   $$H(jw) = \int_{-\infty}^{\infty} h(t)e^{-jwt}dt = \frac{sin(4w)}{w}$$

   If the input to this system is a periodic signal

   $$x(t) = \begin{cases} 1, & 0 \le t < 4 \\ -1, & 4 \le t < 8 \end{cases}$$

   with period T=8, determine the corresponding system output y(t).