PROBLEM:
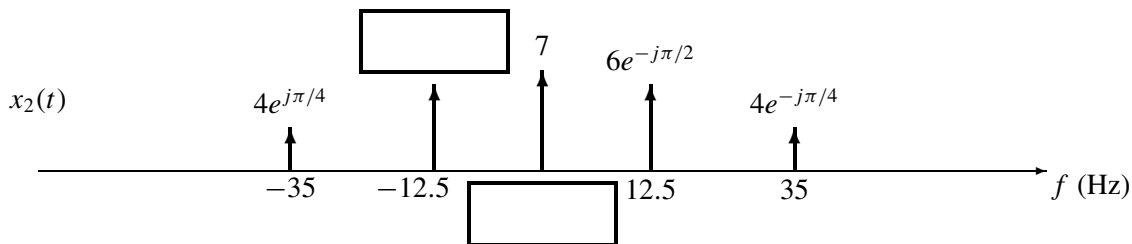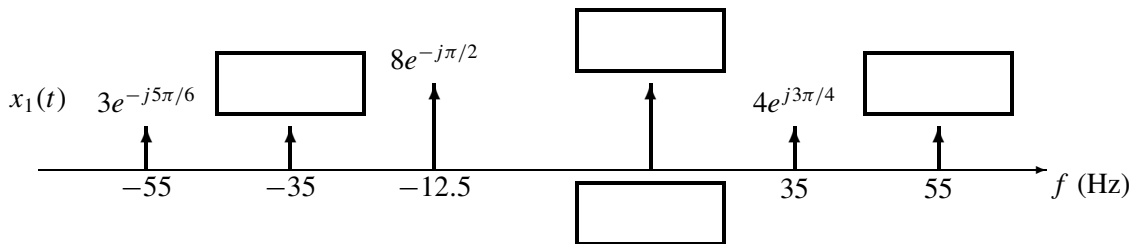
(a) The incomplete spectra for two *real* signals $x_1(t)$ and $x_2(t)$ are shown in the following figures. Fill in the empty boxes for the missing components.

(b) Write an equation for $x_2(t)$ in terms of cosine functions.

(c) Draw the spectrum representation for $x_3(t) = x_1(t) + x_2(t)$.

(d) Is $x_3(t) = x_1(t) + x_2(t)$ periodic? If so, what is the fundamental frequency?