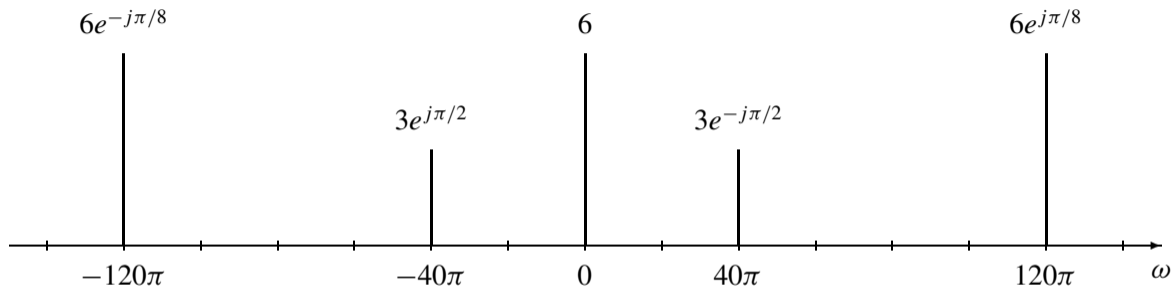


## PROBLEM:

The spectrum of a signal  $x(t)$  is shown in the following figure:



**Note that the frequency axis is radian frequency ( $\omega$ ) *not* cyclic frequency ( $f$ ).**

- Write an equation for  $x(t)$  in terms of cosine functions.
- This signal is periodic. What is the fundamental frequency and the corresponding period of  $x(t)$ ?