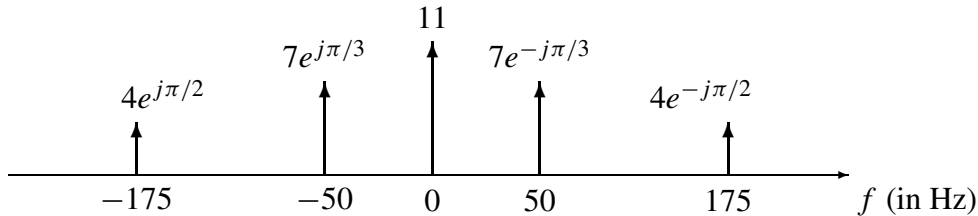


## PROBLEM:

A signal  $x(t)$  has the two-sided spectrum representation shown below.



- Write an equation for  $x(t)$ .
- Is  $x(t)$  a periodic signal? If so, what is its period?
- Explain why “negative” frequency is needed in the spectrum.