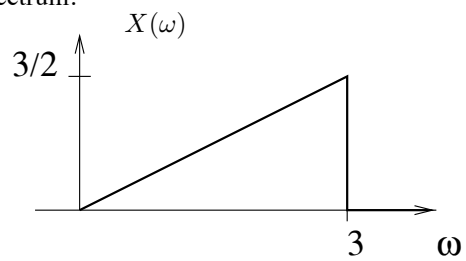


1. (20 points)

A signal $x(t)$ has the following spectrum.



- [10 points] Determine the energy of the signal $x(t)$.
- [10 points] Carefully sketch the spectrum of the signal $y(t) = \delta(t) + x(-2t)$.