Discussion problem assignment:

第一题:

1. For the signal $x(t) = \delta(t) + \delta(t-1)$, find its Laplace transform, determine the poles and zeros plus sketching the pole-zero plot.

第二题:

2. For the following Laplace transform *X*(*s*) with signal *x*(*t*) to be absolutely <u>integrable</u>, determine the signal *x*(*t*) from inverse Laplace transform. Find the Fourier transform of the signal and confirm the inverse Fourier transform is the same as from LT.

$$X(s) = \frac{-4}{s^2 - 4}$$