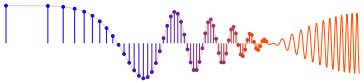

PROBLEM:

Factor the following polynomial and plot its the root locations in the complex plane.

$$P(z) = 1 + \tfrac{1}{2}z^{-1} + \tfrac{1}{2}z^{-2} + z^{-3}$$

In MATLAB see the functions called `roots` and `zplane` (or `zzplane.m` from the *SP-First* toolbox.)
Note: $P(z)$ has a finite number of roots and is equal to zero at the root locations, so we often refer to the plot as a plot of the zeros of $P(z)$.

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