

PROBLEM:

- (a) Consider the complex signal $z(t) = Ze^{j2t}$. Show that the second derivative of $z(t)$ with respect to time can be represented as $\ddot{z}(t) = Qe^{j2t}$ and determine an expression for Q in terms of Z .
- (b) If Z is as plotted in the figure below, plot the corresponding phasor Q for the derivative.

