

PROBLEM:

For the *aliased sinc* function:

$$\text{asinc}(\hat{\omega}, 11) = \frac{\sin(5\frac{1}{2}\hat{\omega})}{\sin(\frac{1}{2}\hat{\omega})}$$

- Make a plot of $\text{asinc}(\hat{\omega}, 11)$ over the range $-4\pi \leq \hat{\omega} \leq +4\pi$. Label all the zero crossings.
- Determine the period of $\text{asinc}(\hat{\omega}, 11)$. Is it equal to 2π ; why, or why not?
- Find the maximum value of the function.

NOTE: the *aliased sinc* function is defined via: $\text{asinc}(\hat{\omega}, L) = \frac{\sin(L\hat{\omega}/2)}{\sin(\frac{1}{2}\hat{\omega})}$

In MATLAB consult help on `diric` for more information.