

Do the following problems in Problem Set of the clasnote, dated May 2, 2002.

1. Problem 4 on pages 45-6.
2. Problem 6 on page 46.
3. Problem 10 on page 47.
4. Problem 11 on page 47.
5. Problem 21 on page 48.
6. Problem 26 on page 50.
7. A first exercise with Matlab. Download the file "periodic.mat", which is listed on the class website as a link just below the link to this homework set. This file is a Matlab workspace file that contains a vector called `signal1`, which is a segment of a nearly periodic discrete-time sequence. You will need to do the following:
 - (i) Start Matlab
 - (ii) Load `periodic.mat`. To do this type in `load periodic` at the Matlab prompt and then press the "Enter" key.
 - (a) Find the length of the vector `signal1`.
 - (b) Find its maximum and minimum values.
 - (c) Find, approximately, the period of this approximately periodic discrete-time signal.