

# Homework 8

## Sampling Theory and the Z-Transform

### Sampling Theory

You should take the scripts home ([to be found here](#)) and play with them.

- Try increasing the sampling frequency: 8000 Hz, 11025 Hz, 22050 Hz, 44100 Hz, 48000 Hz, and 96000 Hz are supported by most PC sound cards.
- Try increasing the bits per sample: 8, 16, 24 are available.

### Z-Transform

Problems 1 to 3 in [Section 9.10 Exercises](#) of Karris explore the z-Transform.