

H O M E W O R K NO. 9

- 6.2 z-Transform and ROC of 3 sequences.
- 6.6 z-Transform of a two-sided sequence.
- 6.10 Relating z-Transforms, DFT and undersampling the DTFT.
- 6.18 Linear convolution using z-Transforms. (skip circular convolution).
- 6.20 Inverse z-Transform for $X_a(z)$ only.
- 6.40 Impulse response and input-output using z-Transforms.
You can use *residuez* to find the partial fraction expansion, and then easily evaluate the impulse response. For part (b) find $Y(z)=H(z)X(z)$ and then use *residuez* to factor and then easily find the inverse z-Transform $y[n]$.
- 6.55 Analysis of the DPCM vocoder using z-Transforms.