

**Homework Assignment #5**

1. Problem 11.16 from the text.
2. Compute the 8-point DFT of the sequence  $x[n] = \{\frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, 0, 0, 0, 0\}$  using the direct expression for the DFT.
3. Repeat Problem 2 for the decimation in time FFT signal flow graph in Figure 11.21 rather than the direct expression. Keep track of all intermediate quantities by putting them on the diagram.