## Worksheet #16 (2017/12/18)

Name: ID:

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- We plan to cover Sections 12.2.1–12.6 today.
- We use Chapter 09 slides 21–32.
- This is corresponding to the textbook pages 501–506.
- 1) What should we do when the input sequence of FFT is not power of two in length?
- 2) Mixed-radix FFT is also a recursive algorithm, what is the stopping criteria? How to solve the "smallest" mixed-radix FFT problem? What's its complexity?
- 3) How to use FFT to solve multiplication of two polynomials?
- 4) In DWT, what is the intuition behind "doubly-indexed basis functions  $\phi_{jk}(x)$  are mutually orthogonal?