

Worksheet #13 (2017/11/29)

Name:

ID:

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Note: We will collect this worksheet at the end of the lecture.

- We plan to cover Sections 7.4–7.6 today.
 - We use Chapter 07 slides 40–46.
 - This is corresponding to the textbook pages 326–333.
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- 1) What are the cons of interpolating high-degree polynomials?
 - 2) What is the limitation of using Chebyshev points for higher-degree polynomial interpolations?
 - 3) In Newton's method, which Taylor polynomial did we use for interpolations?
 - 4) What are the pros and cons of piecewise polynomial interpolation?
 - 5) How to mitigate the cons of piecewise polynomial interpolation?
 - 6) Does Hermite cubic interpolation give unique solution? Why?
 - 7) Does Cubic Spline interpolation give unique solution? Why?
 - 8) Compare Hermite and Cubic Spline interpolation.