

## FOURIER ANALYSIS & METHODS GOALS FOR 2020.03.06

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### 1. LEARNING OBJECTIVES

Our goals for today are:

- (1) You will be able to create best approximations using Legendre polynomials in any bounded interval.
- (2) You will be able to prove the orthogonality of the Hermite polynomials.
- (3) You will be able to prove the formula for the generating function for the Hermite polynomials.

Ready, set, let's go!