FOURIER ANALYSIS & METHODS GOALS FOR 2020.02.17

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1. Learning objectives

Our goals for today are that:

- (1) You can use the properties of the Fourier transform (no need to memorize these, just to know about them and be able to look them up and exploit them).
- (2) You can invert the Fourier transform.
- (3) You understand the statement of Plancharel's theorem and know to start on the right side.
- (4) You understand the statement of the 'big bad convolution approximation theorem' and have some ideas about its proof.

Ready, set, let's go!