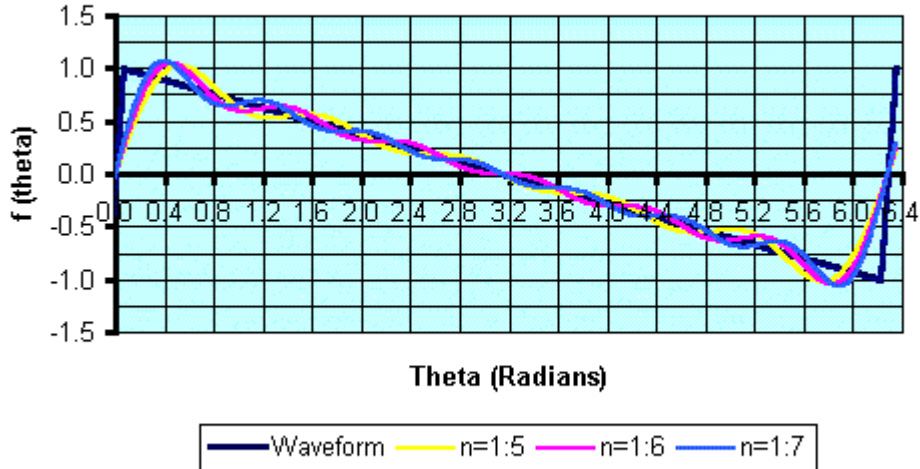## Fourier Construction of a Sawtooth Wave

Adding the additional harmonics up to n = 7 helps improve the agreement, but it can be seen that many more of the higher harmonics are needed to replicate the sharp break at the ends of the sawtooth waveform!

Fourier analysis of waveforms has many potential uses and applications. In these notes we have laid down the basics of Fourier analysis, given a few basic examples and connected them to various physical systems, such as the guitar. We shall also see other examples of the use of Fourier analysis elsewhere in this course.