

Interview with the (New) Dean

In honour of his inauguration as Dean of Mathematics, Overlord of Nerds, *mathNEWS* took the opportunity to ask Stephen Watt some difficult questions, the answers to which students have long and eagerly awaited for at least one entire, seemingly never-ending day. We asked our new Dean:

- How was your weekend?
- Are you a bear?

This is his response:

Finally, someone is asking the important questions. MathNEWS is a beacon of light in a journalistic wasteland!

In answer to your difficult questions:

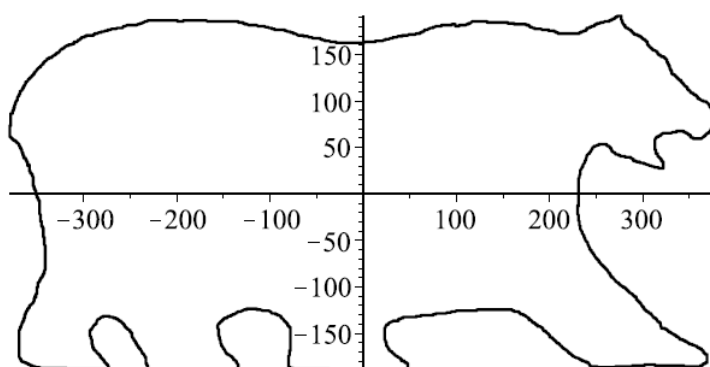
1. *My weekend was bearable, spent mostly on move-related house fix-ups. You never know how many thumbs you have until you try hammering in awkward places.*

2. *As a descendent of many forebears, I must be a bear. René Descartes was on the right track, working towards “I think,*

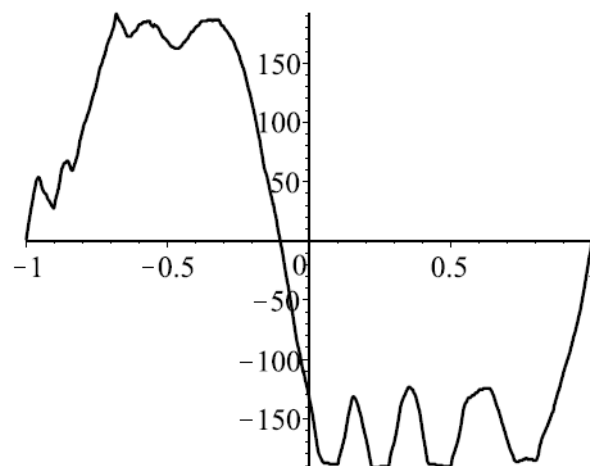
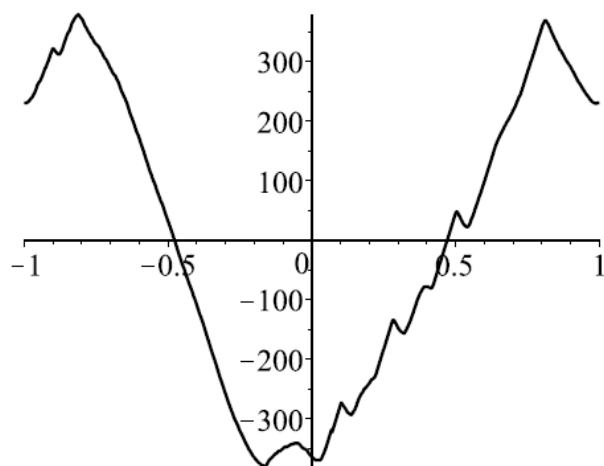
therefore I bear.” But those would be Cartesian bears, $B(x, y)$. As a Canadian, I support polar bears, $B(r, \theta)$. The attached Maple worksheet computes polar bears using truncated Chebyshev series. If those bears aren’t hairy enough, you can use a Fourier basis.

We have included Watt’s beanalysis below:

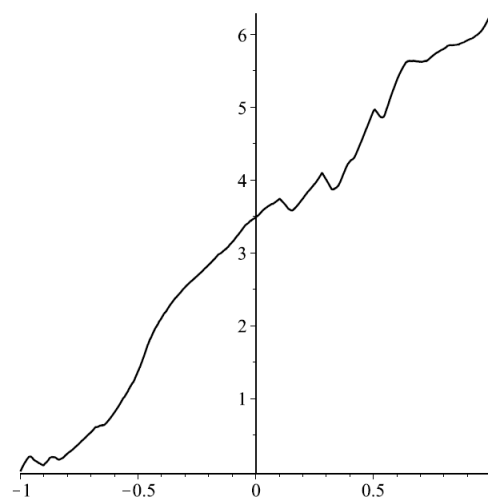
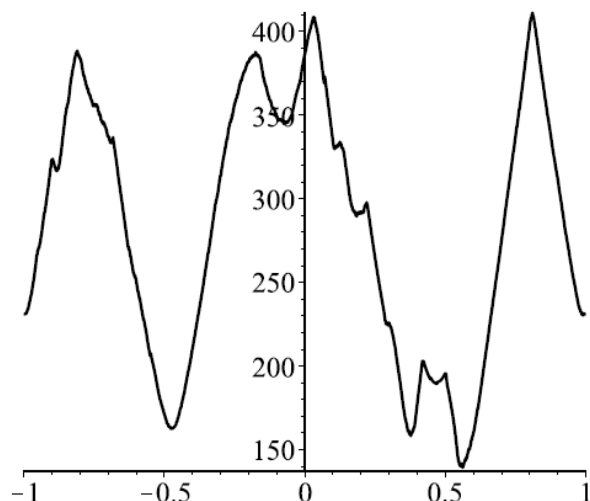
Approximately a bear



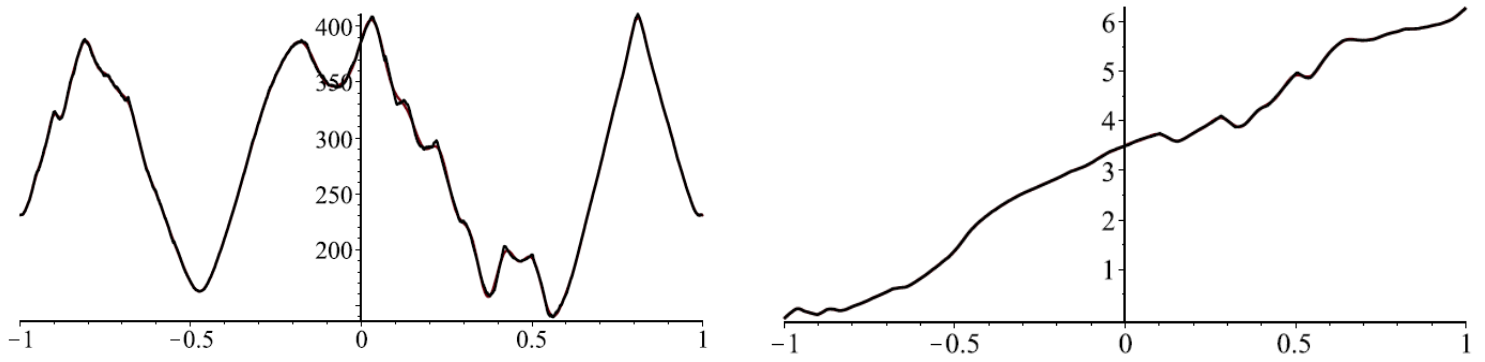
Parametrize the coordinates into x and y



Parametrize as r and θ



Smooth out the functions



Voilà! A polar bear!

