Question 1

We are going to cover the Dirac delta function in class next week (It's in Boas Ch 8, Section 11, or the last 3 pages of my Ch 5 lecture notes, pp "Fourier-16" to "Fourier-18" I'm curious if you already know about them - so here's a quick question. What is the integral (from x=0 to x=10) of (3x+1)delta(x-2) dx ?

Question 1 options:
- zero
- 1
- 2
- 7
- I know this, but it's not listed here!
- I don't know this (yet)

Question 2

Optional: If you want to elaborate or explain your answer for that previous question, we're interested!

Question 3

Explain in your own words what "Fourier's trick" is, both mathematically and conceptually.

Question 4

We made an analogy in class between "expanding a vector in a basis" and "expanding a function with a Fourier Series". Did you understand that argument, did it make some sense to you, or did you get lost? In your own words, try to articulate that analogy - how do you think about it?

Information

Every week, we ask you to submit a question you have about the reading assigned for the upcoming class. What seemed hard, was something confusing, what would you like us to spend class time on? And/or, if you prefer, make a (constructive) comment on someone else's question!

The place to do this is our "Discussion forum". After completing this survey, find the forum for this week, and post there! This is, from here on out, extra credit rather than required (but strongly recommended, please participate!)