Dror Bar-Natan: Classes: 2004-05: Math 157 - Analysis I:

Homework Assignment 17

Assigned Tuesday February 8; due Friday February 25, 2PM, at SS 1071

Required reading.   All of Spivak's chapters 18 and 19.

To be handed in.   From Spivak Chapter 19: Part (vi) of each of problems 1, 2, 3, 5, 6.

In class review problem(s) (to be solved in class on Tuesday February 22). Chapter 19 problem 6i: Find

$$\int \frac{2x^2 + 7x - 1}{x^3 + x^2 - x - 1}dx.$$

Recommended for extra practice.   All else in problems 1-6 of Chapter 19. Never finish your work!!! Just get to the point where you are convinced that you know how to continue. In particular, avoid writing what you can do in your head and don't bother to simplify your results.

For your information, Followup to the email from the last assigment:

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Hi Dror,
please pass this message on to your students:


FEB.22, 2005 from 8-10pm broadcasting live from U of
T- Totally Sweet Radio-promotion for the documentary
"easy as pi", pi day 2005 and a reciting digits of pi
contest! Come one come all!

if you want to compete in the pi reciting contest
contact:
pimovie@yahoo.ca
thanks,
Katie
producer+director+editor
--easy as pi--
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(And see http://www.yazmedia.com/pimovie/index.html).

Just for fun.

- Is there an operation ⋆ (star) that relates to × (times) like × relates to + (plus)? I.e., we hope that ⋆ and × will satisfy P1–P13, or at least P1–P9, with ⋆ replacing × and with × replacing + (possibly with some replacemet for the values of 0 and 1). Hint: $a \star b = a^b$ won't work, if only for $a^b \neq b^a$ and thus P8 would fail.

- Is there an operation ● that relates to ⋆ like ⋆ relates to ×?

- Write the obvious third, fourth and fifth parts of this question and solve them (you may wish to use the symbols ⊗, ⊛ and #).