

MATH V1201 SECTIONS 002 & 003 HOMEWORK 9
DUE APRIL 22, 2015

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1. SOME STEWART PROBLEMS

- (I.1) 14.6.59.
- (I.2) 14.6.67.
- (I.3) 14.7.23. Use level curves (traces), *not* the 3D plot, to estimate the critical points. Use Mathematica to draw them for you (Problem (II.2)).
- (I.4) 14.7.54.
- (I.5) 14.7.55.

2. MATHEMATICA

- (II.1) As I just learned, you can use Wolfram Alpha to turn plain text into correct Mathematica code, entirely inside Mathematica, by starting a line with an equal sign. (You must be connected to the internet.) For example the following plots $x^2y^3 + xy$, $-2 \leq x \leq 2$, $-2 \leq y \leq 1$, and tells you the Mathematica code to produce the plot:
`=plot x^2y^3 + xy for x between -2 and 2 and y between -2 and 1`
(Try it. As many of you have noted, Wolfram Alpha is *much* more forgiving of imprecise syntax than Mathematica is. The Mathematica style is appropriate for a programming language; Wolfram Alpha's is probably appropriate for a tool for one-off computations.)
- (II.2) Do the graphing part of Problem (I.3).

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