Math 275 - Spring 2016
Homework 6
Due March 22, 2016

Even in engineering-driven Silicon Valley, the buzzwords of the moment call for building a "lean startup" that can "adapt" and "evolve" to an ever-changing environment. Would-be entrepreneurs are told to listen to what customers say they want, make nothing more than a "minimum viable product," and iterate our way to success. But leanness is a methodology, not a goal. Making small changes to things that already exist might lead you to a local maximum, but it wont help you find the global maximum. You could build the best version of an app that lets people order toilet paper from their iPhone. But iteration without a bold plan wont take you from 0 to 1.

—Peter Thiel

Turn in: 10.8, 10.13, 10.15, 10.19, 11.4, 11.7, 11.13
Find the equation of the tangent plane to the given surface at the given point.

1. $\ln(xyz) = x + yz^{-1}$, $(1, e, e)$

Recommended: 10.1, 10.3, 10.10, 10.11, 10.14, 10.20, 10.21, 11.6, 11.8, 11.10

9. $x^2 - 3x + y^2 - 5y + z^2 - 17 = 0$. (2,3,5)