

ASSIGNMENT

Read rest 14.3 and 14.4 up through example 1

- p. 802 57, 61, 63, 65; p. 811 5, 7

TAKE-AWAYS

After reading this section, attending this class and doing this homework you should

- understand Clairaut's theorem about mixed partials
- know how to find the equation of the tangent plane at a point (eq 2 in Definition on p 806)
- understand why that plane actually is the tangent plane
- visualize what a tangent plane does and how it might be useful
- know what it means for a function to be differentiable at a point and how to show that a function is differentiable at a point (Theorem 1)