

MATH 310 Exam III (14.4 - 15.3, 15.6) Review

1. Know how to find the equation of the tangent plane at a point and the linearization of a function at a point.
2. Know the chain rule.
3. Know how to find the gradient and directional derivatives.
4. Know how to find the extreme values of functions over a region.
5. Know how to find the double integral over a rectangle and over a general region.
6. Know how to convert to and from polar coordinates.
7. Know how to evaluate triple integrals over rectangular coordinates.

Example exercises: Quiz & Homework questions; Ch. 14 Review, #23 - 63; Ch. 15 Review, #1-8, 17, 21 - 30, 35, 36, 47.