Multivariable Midterm Exam Topics
2018

- Vectors
  - Magnitude and Direction
  - Component Form
  - Unit Vector
  - Parallel, Orthogonal
  - Distance between points
  - Angle Between 2 Vectors
  - Area of Parallelogram
  - Volume of Parallelepiped
- Parametric Equations of line
- Equations of a Plane
- Angle Between Planes
- Intersection of Planes
- Distance between Point and Plane / Point and Line
- Rectangular, Cylindrical and Spherical Coordinates- converting
- Vector Valued Functions
  - Limits
  - Continuity
  - Differentiation
  - Integration
  - Velocity/Acceleration/Speed
  - Unit Tangent Vector
  - Principal Unit Normal Vector
  - Arc Length Parameter
- Functions of Several Variables
  - Level Curves/contour Maps
  - Limits and Continuity
  - Partial Derivatives including Higher Order