Calculus 131, Chapter 10 Summary ~ things you should know
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Chapter 10 - Important concepts:

Gauss-Jordan algorithm, solving systems of linear equations

matrix addition and subtraction

matrix multiplication by a scalar

matrix times matrix multiplication

inverse of a matrix

eigenvalues and eigenvectors

Be able to:

use the Gauss-Jordan algorithm to solve a matrix

solve a system of linear equations (Gauss-Jordan only is required, not echelon method)

    where possible, identify values for variables

    identify a system that has no solution

    identify a system that has infinite solutions and express an answer in terms of a parameter

add and subtract matrices

multiply a scalar value times a matrix

multiply a matrix times a matrix

    in a given scenario, identify when matrix times matrix multiplication is not possible

    in a given scenario, identify whether *AB* or *BA* produces the desired result

find the inverse of a matrix

    identify whether a given matrix does or does not have an inverse

    use an inverse matrix to solve a matrix equation

for a given matrix find the eigenvalues and identify an associated eigenvector for each eigenvalue

(as always) interpret and solve life science applications similar to those in the text and on discussions

    worksheets

Review exercises from the text:

Chapter 10 Review, 3 – 62 (answers to odd-numbered problems are in the back

Preparing for Exam 1 – be able to answer all questions on the sample exams: