UPDATED GENERAL INFORMATION — OCTOBER 20, 2008

Here is the fourth assignment, which is due **in your discussion section** on **Tuesday, October 28**. All exercises are taken from the course text.

Page 92 and following: 2, 4, 12*, 18* (* only the first part), 36 (describe only)

Page 107 and following: 8, 10, 18, 30

Comments regarding Examination 1

The exam will cover Sections 1.1 – 1.6 of the text and also the portions of Section 1.7 involving polar coordinates (so nothing about cylindrical or spherical coordinates).

Knowledge of how to add vectors, multiply a scalar times a vector, and take dot and cross products will be required; these include the formula for finding the perpendicular projection of one vector onto another. More generally, the concept of perpendicularity is important, both in terms of the standard characteization for vectors and the recognition of the perpendicular direction to a plane from a defining equation. Some examples involving vectors with more than 3 coordinates are likely to appear, and it may be necessary to know how to find the equation of a plane containing three noncollinear points. The coverage from section 1.7 includes conversion between rectangular and polar coordinates (BOTH WAYS) and the ability to rewrite the equation defining a curve in one of these if the other description is given.

There will be no proof-like derivations on this exam.

No electronic computing devices will be necessary, and none will be permitted.