

EXAM #1 INFORMATION– MATH 1260
FALL 2014

EXAM ON 10/7/14

There will be 4 pages of questions.

- (a) The first page will contain about 6-10 short answer questions (true or false/fill in the blank/quickly compute/etc). For instance I could ask you to state the formula for arclength, or compute the velocity vector of a particle at a certain position. I could ask whether two vectors are perpendicular or for you to give a formula for the cross product. I could ask whether a point is on a plane or what the definition of the gradient is. Finally, I could ask about multiple integrals (ie which of the following volumes does this integral compute). None of these would require any substantial computations.
- (b) There will be a page about vectors and planes (and equations thereof). You should be familiar with things like the cross product and the dot product, equations of planes, projecting vectors onto other vectors and also projecting vectors onto planes. I could also ask about tangent planes to surfaces here.
- (c) There will be a page about space curves and/or max-min problems on surfaces. Make sure you are familiar with the chain rule we learned in class as well.
- (d) There will be a page about multiple integrals. I may ask you to setup an integral which you may or may not be required to compute.
- (e) There will be an extra credit problem.