

ASSIGNMENT

Read section 16.2 up to page 951 for this assignment

- p. 958 1,5,9,45,66

TAKE-AWAYS

After reading this section, attending this class and doing this homework you should

- understand the definition of a scalar line integral, how to compute a scalar line integral and what it means
- realize that problem 1 walks you through how to do all these problems
- know how scalar line integrals can be applied to compute total mass, charge, etc.
- accept that in principle these integrals can get close to impossible but that on the hw they are likely not to be too close to impossible
- see that these problems are culminations of a lot of things we've been talking about: they require you to parameterize a curve, to find its velocity, to find the magnitude of a vector, and to integrate. They're good problems that way.