Assignment

14.5 up to pg 817

- p. 823 5, 9, 13, 19

Take-aways

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

- know the definition of the gradient and how to compute it
- understand the properties the gradient has (Theorem 1) and why the properties are true
- understand algebraically and geometrically what it means to plug a curve into a function (we've already seen this with scalar line integrals)
- know how to compute $\frac{d}{dt} f((t))$ using the gradient
- understand both formally and intuitively why Theorem 2 is true