MATH 351: RIEMANN SURFACES AND DESSINS D'ENFANTS
HOMEWORK #16

Problem 16.1. Let $f : \mathbb{P}^1 \to \mathbb{P}^1$ be the morphism defined by $f(z) = 2z^3 + 3z^2$. What is the degree of f? Find all points $p \in \mathbb{P}^1$ where f is ramified, and their image $f(p) = q \in \mathbb{P}^1$. *[Hint: Remember the first lecture, and don't forget about ramification at ∞...]*

Date: Wednesday, 16 February 2013.