

Pries: 619 Complex Variables II. Homework 9.

1. Miranda V.1 H
2. Miranda V.1 I
3. Miranda V.2 A
4. Miranda V.2 E
5. Miranda V.3 H
6. Check out Miranda V.Prop 3.8
7. Miranda V.4 J
8. Let X be a smooth compact Riemann surface and let $P \in X$. Show there exists a non-constant rational function $f \in M(X)$ which has a pole only at P .
9. Let X be a smooth compact Riemann surface of genus g . Show there exists a holomorphic map $F : X \rightarrow \mathbb{C}_\infty$ with degree $d \leq g + 1$.