PROBLEM SET 8 (DUE ON TUESDAY, NOV 27)

(All Exercises are references to the November 18, 2017 version of Foundations of Algebraic Geometry by R. Vakil.)

Problem 1. Exercise 10.1.M (sections of morphisms)
Problem 2. Exercise 10.2.E (graphs of rational maps)
Problem 3. Show that every rational map \( \pi : \mathbb{P}^1_{\mathbb{C}} \to \mathbb{P}^1_{\mathbb{C}} \) can be represented by a morphism \( \mathbb{P}^1_{\mathbb{C}} \to \mathbb{P}^1_{\mathbb{C}} \). Is this still true if all the \( \mathbb{P}^1_{\mathbb{C}} \) are replaced by \( \mathbb{P}^2_{\mathbb{C}} \)?