Problem 1 (60%)

Electricity prices are currently high. A proposed solution to the problem is to ban electricity exports to Europe.

Start by analyzing the market in a Ricardian model. There are two sectors, electricity (E) and other (O), and two countries Norway and EU. The labor unit requirements are

	Norway	EU
Electricity	2	4
Other	2	2

Assume that consumers always spend twice as much on O compared to E, that the size of the labor force in Norway is a third compared to the labor force in EU, and that the free trade equilibrium features complete specialization.

a) Derive the world relative supply curve under free trade.

b) What is the equilibrium world market price under free trade?

c) Does the export ban work in terms of reducing electricity prices in Norway? Show what the Norwegian electricity price is under autarky.

d) Is the export ban improving real income for people in Norway? Discuss why/why not.

e) Is the economic analysis above sufficient to analyze the problem? Are there factors outside the model that also need to be considered? Discuss briefly.

Your answers should be accompanied by either figures or math (or both).

Problem 2 (20%)

Consumers point out that the export ban raises real income for most people in Norway. Discuss the merit of this argument in the context of a model with two factors (labor and capital), two goods (electricity and other) and two countries (Norway and EU). Your answers should be accompanied by either figures or math (or both).

Problem 3 (20%)

Policymakers suggest an alternative way of reducing electricity prices: subsidizing electricity producers. Analyze the economic impact of this policy in a closed-economy model with two sectors (electricity and other). Will the policy work in terms of reducing prices? Economists argue that the policy will lead to misallocation of resources. Discuss and determine the magnitude of misallocation (i.e., how much output is lost).