

1. Describe some of the trade-offs faced by each of the following:
 - a. a family deciding whether to buy a new car
 - b. a member of Congress deciding how much to spend on national parks
 - c. a company president deciding whether to open a new factory
 - d. a professor deciding how much to prepare for class
 - e. a recent college graduate deciding whether to go to graduate school

2. Fluorescent lights cost 10,000 VND per unit, with a lifespan of 15,000 hours and an electricity consumption of 38W per hour. LED lights cost 100,000 VND per unit, with a lifespan of 25,000 hours and an electricity consumption of 20W per hour. The electricity price is 2,500 VND per kwh. Both types of lights provide the same luminous flux. Should consumers use LED lights or fluorescent lights? (Calculate the result based on the marginal principle).

3. Name a way that your family interacts in the factor market and a way that it interacts in the product market.

4. Given the following data table:

Product	Labor required per unit (hours)	
	Country A	Country B
Hand Mixer	3	4
Lamp	2	1

Country A has 1,200 labor hours available, and Country B has 800 labor hours available. Assuming all resources and technology are used optimally, and opportunity costs remain constant, determine:

- a. The production possibility frontier (PPF) of each country. Draw the graphs.
- b. Redraw the production possibility frontier for Country A, assuming each hand mixer now requires 2 hours of labor (other things unchanged).