

Economics 101
Spring 2001
Section 4 - Hallam
Problem Set #1

Due date: January 22, 2001

1. Give 2 examples of each of the following types of inputs for a producer who is making computer tables, monitor stands, and chairs for use in home offices.
 - a. capital
 - b. expendable
 - c. capital service

2. Consider the following decision situations. In each identify the opportunity cost of each of the alternative choices.
 - a. A lawyer who is deciding whether to take a case defending an indigent terrorist who will pay nothing but will bring a lot of publicity to the lawyer's firm, or to take a rather routine but expensive divorce case that promises a huge fee but little publicity for the firm.
 - b. A middle-aged woman who is deciding whether to rent a duplex she owns out on the market for \$750 a month or to let her newly married son live in it for \$200 a month.
 - c. A business man who has a yard and lawn service who is deciding whether to operate his business for another year with expected net returns of \$70,000 or lease the business to his son in law for \$40,000 a year and work as a handy man in the condominium association for \$20,000 per year.
 - d. A student who is considering a full time job for the coming year at \$19,000 and cutting back on his hours of credit from 16 per semester to 10 per semester. An alternative part time job compatible with 16 credit hours pays \$7,000 per year.
 - e. A car manufacturer who is considering increasing the output of light trucks and SUVs with the same number of workers and assembly lines.

4. Which of the following situations is better for the consumer?
 - a. Income of \$20,000 per year with a market basket of goods priced at \$50.00 or income of \$35,000 per year with a market basket of goods priced at \$70.00.
 - b. Income of 1,000,000 yen per year with a market basket of goods priced at 8000 yen or income of \$50,000 per year with a market basket of goods priced at \$500.
 - c. Income of \$60,000 per year with a market basket of goods priced at \$150 or income of \$200,000 per year with a market basket of goods priced at \$400.

4. Draw a production possibility frontier (boundary of $P(x)$) for
 - a. The case where there is increasing opportunity cost
 - b. The case where there is constant opportunity cost

5. Give an example of a production possibility frontier (boundary of $P(x)$) for
 - a. The case where there is increasing opportunity cost
 - b. The case where there is constant opportunity cost

For each case explain the shape of the boundary of $P(x)$.

6. Robinson Crusoe and Man Friday live on an island. The following table represents their output in a day of work.

	Fish	Cassava
Robinson Crusoe	5	20
Man Friday	8	24

- Who has an absolute advantage in the production of fish?
 - Who has an absolute advantage in the production of cassava?
 - Who has a comparative advantage in digging cassava?
 - Who has a comparative advantage in fishing?
7. Consider the following data.

Tennis Shoes	Basketball Shoes
43	0
42	7
40	13
36	18
30	22
22	25
12	27
0	28

- On a piece of graph paper draw the production possibility frontier.
 - What is the opportunity cost of 6 more tennis shoes when the firm is already producing 30?
 - What is the opportunity cost of 2 more tennis shoes when the firm is already producing 40?
 - What is the opportunity cost of 8 more tennis shoes when the firm is already producing 22?
 - What is happening to the opportunity cost of tennis shoes as the quantity produced goes up?
- Work Skills and Tools problem 1-1 in the study guide.
 - Work Skills and Tools problem 1-2 in the study guide.
 - Work Skills and Tools problem 1-3 in the study guide.
 - Work Skills and Tools problem 2-1 in the study guide.
 - Work Skills and Tools problem 2-2 in the study guide.
 - Work Skills and Tools problem 2-5 in the study guide.

On skills and tools problems, do the work on another sheet of paper, or make a photocopy of the pages of the workbook to turn in.