

Name: _____

Period: _____

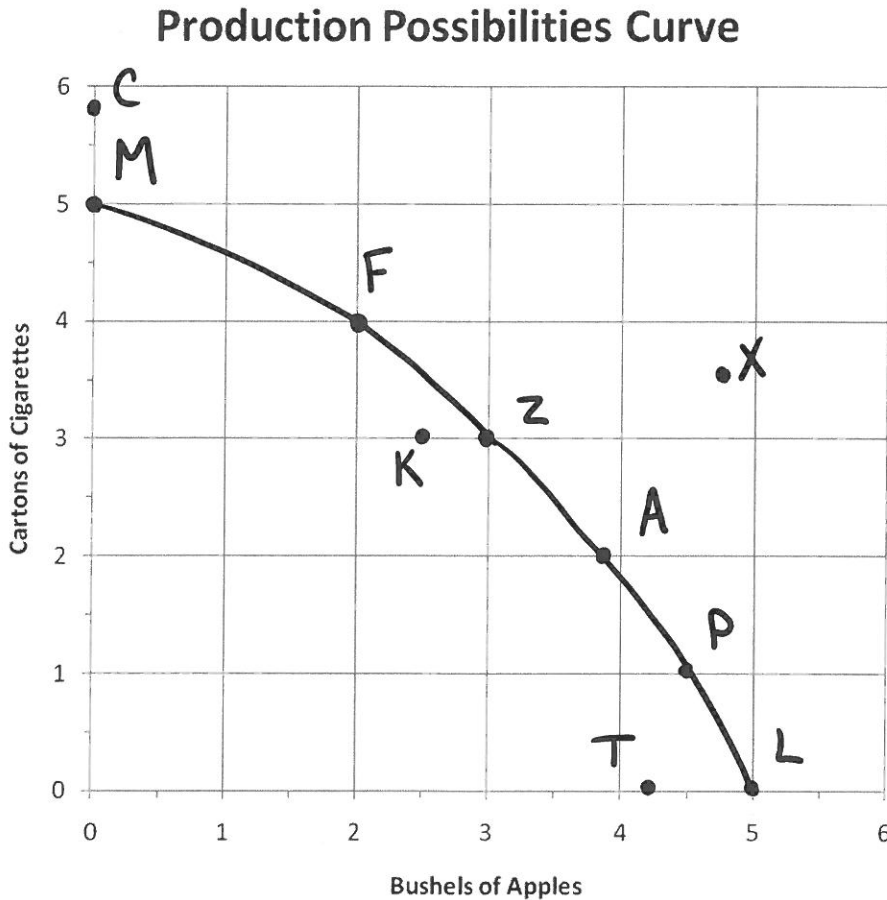
Unit 1 Homework

Scarcity and Opportunity Cost

1. Identify the factor of production that best matches each of the following goods:

- | | | | |
|----------|---|----|------------------|
| <u>A</u> | oil | A. | land |
| <u>B</u> | 5 workers | B. | labor |
| <u>C</u> | factory | C. | capital |
| <u>C</u> | sewing machine | D. | entrepreneurship |
| <u>B</u> | 8 hours worked | | |
| <u>B</u> | Bachelor of Science in Engineering degree | | |
| <u>A</u> | 3 acres | | |
| <u>A</u> | cotton | | |
| <u>D</u> | mass production techniques | | |
| <u>C</u> | hammer | | |

2. On the production possibilities curve below, label which points are efficient, which points are inefficient, and which points are not possible.



Efficient: M, F, Z, A, P, L
Inefficient: K, T
Not Possible: C, X

3. Complete Columns 6, 7, and 8 in the production possibilities schedule below as the economy shifts labor from taping hockey sticks toward sharpening hockey skates (A to F).

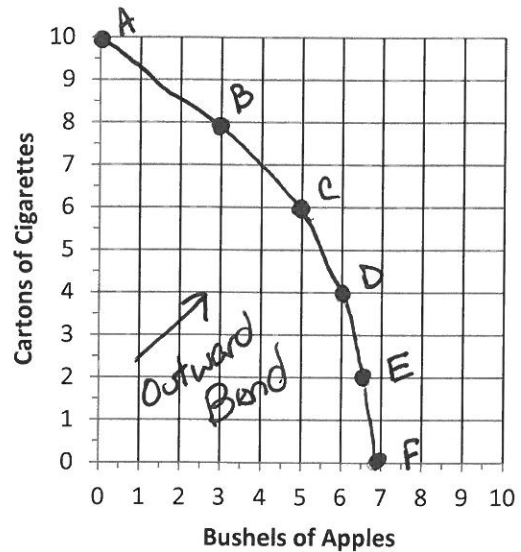
Production Possibilities Schedule

1	2	3	4	5	6	7	8
Mix of Output	Workers Taping Hockey Sticks	Hockey Sticks Taped per Day	Workers Sharpening Hockey Skates	Hockey Skates Sharpened per Day	Gain in Hockey Skates Sharpened	Loss in Hockey Sticks Taped (Opportunity Cost)	Opportunity Cost per Hockey Skate Sharpened
A	5	100	0	0	—	—	—
B	4	80	1	42	42	20	.48
C	3	60	2	68	26	20	.77
D	2	40	3	87	19	20	1.05
E	1	20	4	95	8	20	2.5
F	0	0	5	100	5	20	4

4. Complete the production possibilities schedules below by filling in hypothetical numbers so that they show the specified law of opportunity cost for each one. Then sketch the production possibilities curve for each schedule on the corresponding graph template so that it too shows the specified law of opportunity cost. Use numbers that fall within the maximum X and Y values given on the graph template.

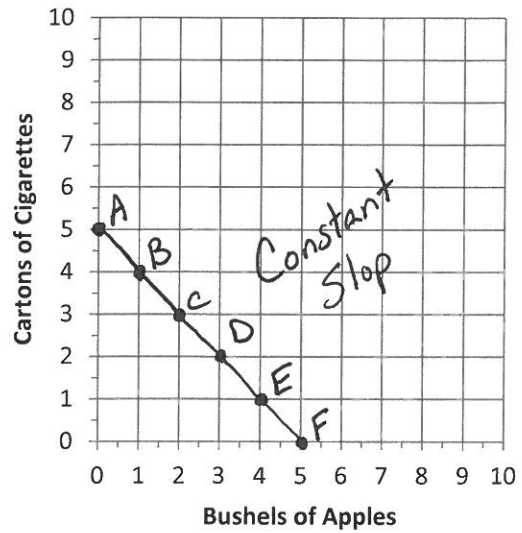
Law of Increasing Opportunity Cost

Mix of Output	Cartons of Cigarettes	Bushels of Apples
A	10	0
B	8	3
C	6	5
D	4	6
E	2	6.5
F	0	6.75



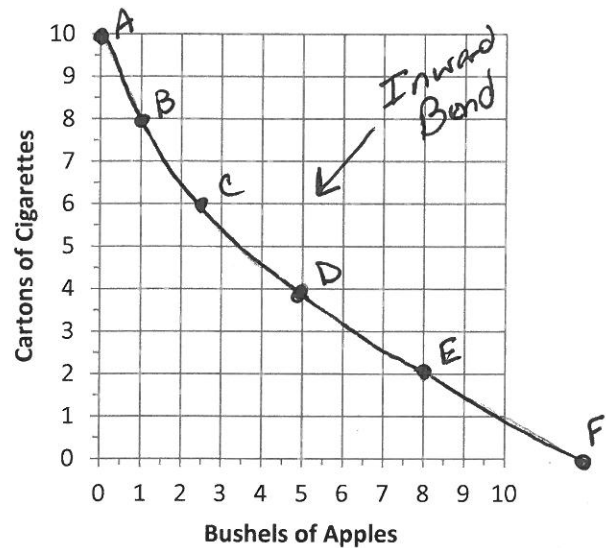
Law of Constant Opportunity Cost

Mix of Output	Cartons of Cigarettes	Bushels of Apples
A	5	0
B	4	1
C	3	2
D	2	3
E	1	4
F	0	5



Law of Decreasing Opportunity Cost

Mix of Output	Cartons of Cigarettes	Bushels of Apples
A	10	0
B	8	1
C	6	2.5
D	4	5
E	2	8
F	0	11.5



5. Which of the above hypothetical laws from Item 9 represents the actual nature of opportunity costs as resources are shifted from the production of an original good to the production of a new good? Explain why this is so.

The law of increasing opportunity cost b/c labor becomes decreasingly productive as resources are shifted from the production of an original good to the production of a new good in the short-run