

PPC Practice

1. Jackie land is known for the production of Cupcakes and Robots. The following is a PPT for Jackie land:

	A	B	C	D	E	F	G	H	I	J
Cupcakes:	0	2	6	10	14	18	22	26	28	30
Robots:	30	28	26	22	18	14	10	6	2	0

- Draw and label (each axis and each point). Put cupcakes on the Y highlight the curve with a highlighter
- Indicate on the graph with Point K where inefficient is.
- Indicate on graph with Point L where unattainable is Note that points A – J indicate efficient uses of resources.
- Use a colored highlighter to show growth
- Use a different colored highlighter to show decline

2. A zoo cannot have everything it wants. It has to make choices. The zoo committee has decided that it can have several concession stands. It has to decide how many popcorn stands and how many cotton candy stands to have scattered around the zoo. The committee made up a table of the different combinations depending upon what the committee has determined to be the cost of each stand. Now the committee has to decide what combination is right.

a. Use the table below and graph a Production Possibilities curve on a graph: put Cotton candy on the Y axis.

Popcorn

Cotton Candy

0	10
1	9
2	7
3	4
4	0

- Next, label a point of underutilization (inefficiency). Call it Point A, Next, label a point of efficiency. Call it Point B. Last, label a point that is now unattainable. Call it Point C. highlight each point.
- Look at the table: To get one popcorn stand, how many cotton candy stands have to be given up (marginal cost)? $10 - 9 = ?$
- What is the marginal cost of 3 popcorn stands?
- What is the marginal cost of 4 popcorn stands?

3. Plot the following combinations of good X and good Y on the graph below. Plot all points and connect them with a smooth curve.

Good X	Good Y
37	0
34	10
30	17
28	20
20	29
10	36
0	40

Answer the following questions:

- a. Calculate the cost of increasing production of good X from 0 to 10 units, as measured in the amount of good Y that would need to be sacrificed.
 - b. Calculate the cost of increasing production of good X from 10 to 20 units, as measured in the amount of good Y that would need to be sacrificed.
 - c. Calculate the cost of increasing production of good X from 20 to 30 units, as measured in the amount of good Y that would need to be sacrificed.
 - d. What happens to the opportunity cost as the production of good X increases?
4. Plot the following combinations of bats and rackets produced by the Athletic Country on a graph. Plot all points and connect them with a smooth curve.

Bats	Rackets
0	420
100	400
200	360
300	300
400	200
500	0

Answer the following questions:

- a. If Athletic Country currently produces 100 bats and 400 rackets, what is the opportunity cost of an additional 100 bats?
- b. If Athletic Country currently produces 300 bats and 300 rackets, what is the opportunity cost of an additional 100 bats?
- c. Why does the additional production of 100 bats in number 2 above cause a greater tradeoff than the additional production of 100 bats in number 1 above?
- d. Suppose the Athletic Country is producing 200 bats and 200 rackets. How many additional bats could they produce without giving up any rackets? How many additional rackets could they produce without giving up any bats?
- e. Is the production of 200 bats and 200 rackets efficient? Explain.