

Composite Goods



Apples and Bananas aren't Everything

- What happens if there are more than two goods?

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- What happens if there are more than two goods?
- Suppose we are making the choice among
 - Apples
 - Bananas
 - Oranges
 - Grapefruit

Extending the Model

- We could write $U(A,B,O,G)$
$$p_a A + p_b B + p_o O + p_g G = Y$$

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$$p_a A + p_b B + p_o O + p_g G = Y$$
- This is madness. The graphs get too complicated, even worse when we think about extending to many different goods

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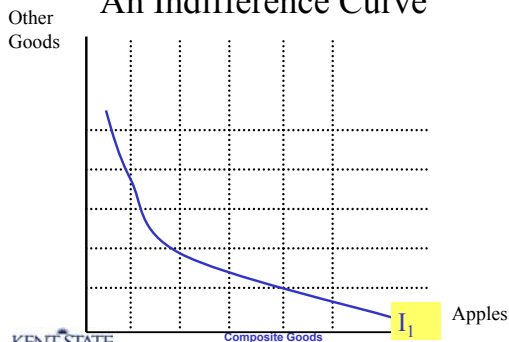
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- In this case,

$$X = p_b B + p_o O + p_G G$$

- Our Utility function is now $U(X, A)$
- Our budget constraint is now

$$X + p_a A = Y$$

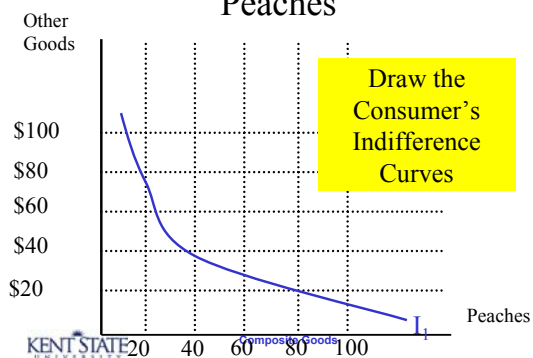
An Indifference Curve

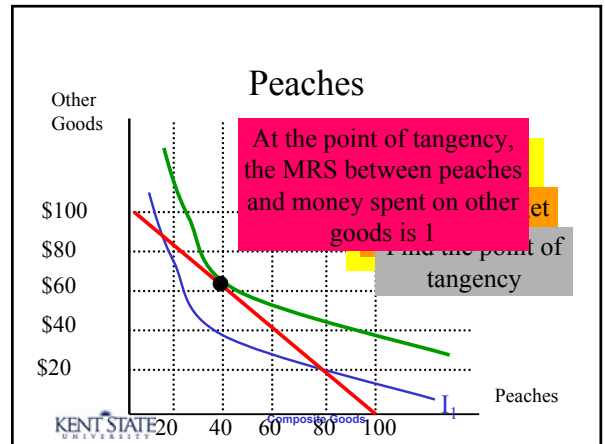
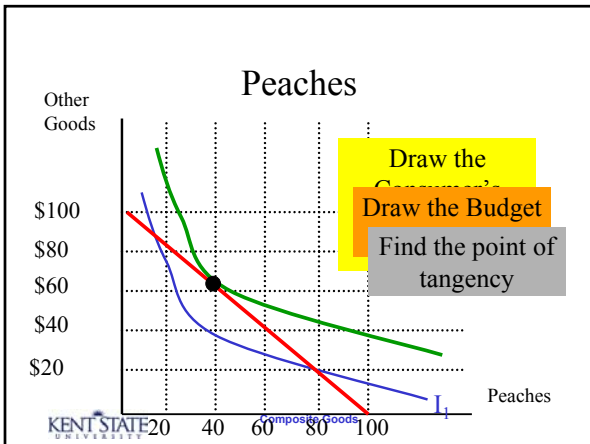
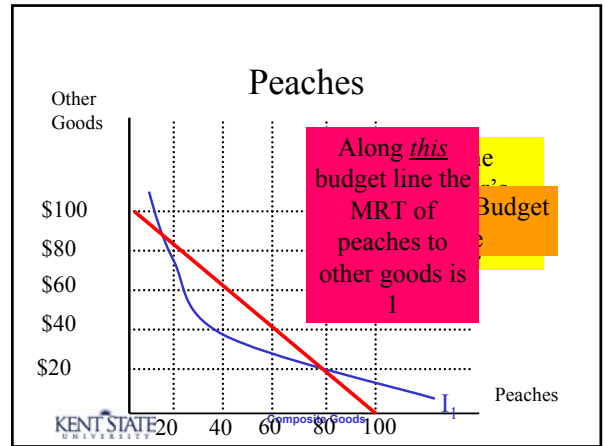
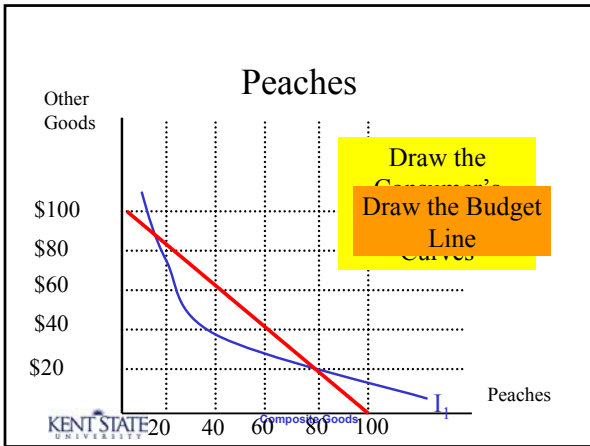


An Application

- A Consumer has income of \$100 a week. Peaches cost \$1 each. Show graphically, how many peaches she will purchase.

Peaches





A Peach of a Problem

- She is now offered a chance to purchase peaches, from another vendor. The first 20 cost 50 cents each and others cost \$1.50 each. Should she switch?

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- It is an all or nothing deal.

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Nonsense!

A Peach of a Problem

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- At the old prices,

$$MRS = MRT = \$1.$$

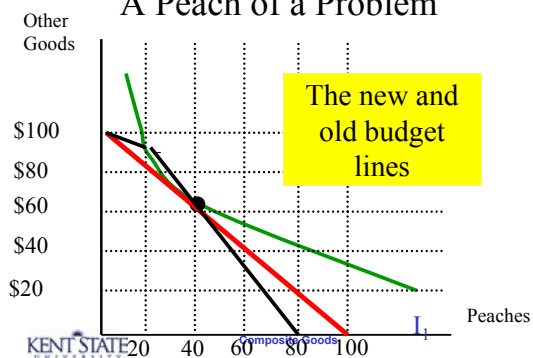
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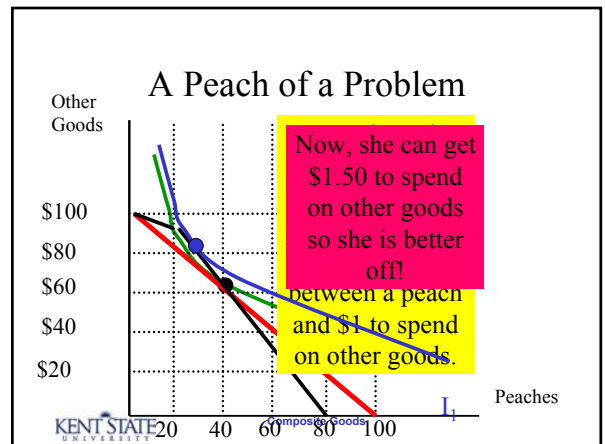
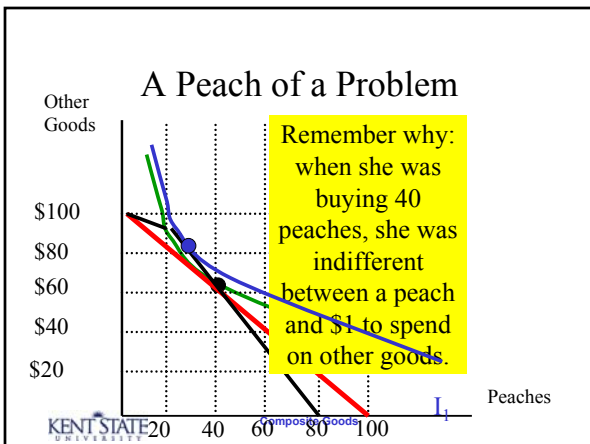
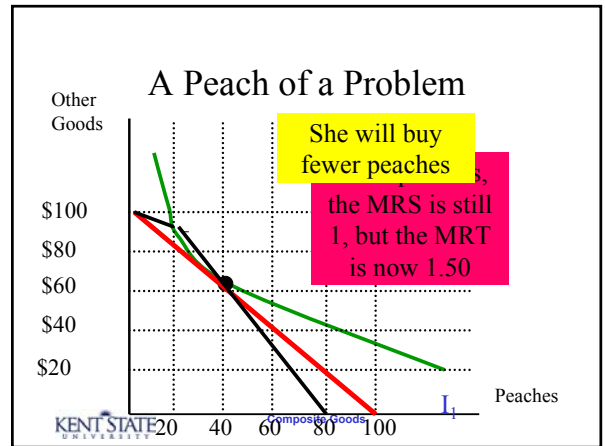
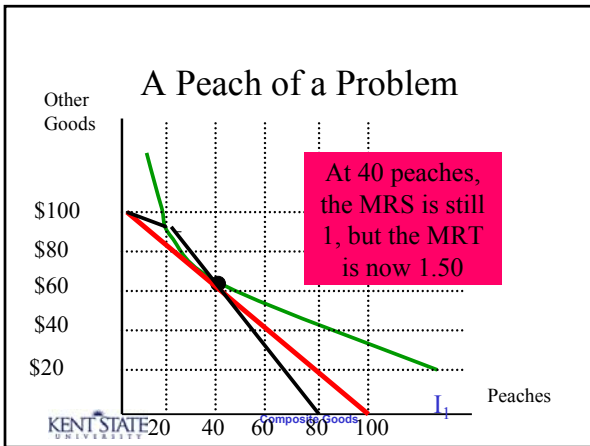
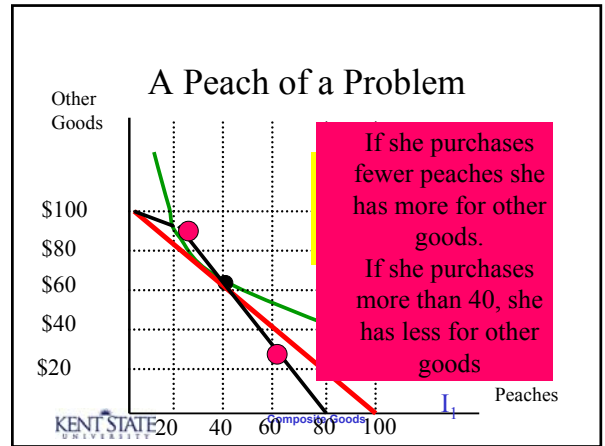
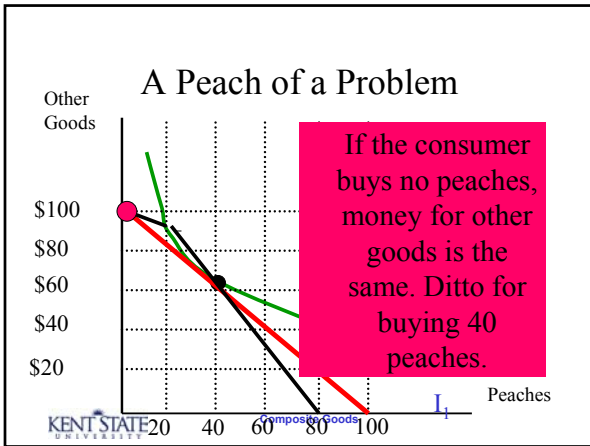
- Some people argue that it makes no difference. Forty peaches cost \$40.
- But there is a difference. At the old prices, $MRS = MRT = \$1$.
- If the consumer purchases 40 peaches, the MRS is still 1.

A Peach of a Problem

- Some people argue that it makes no difference. Forty peaches cost \$40.
 - But the **The MRT is now \$1.50** prices,
- $$MRS = MRT = \$1.$$
- If the consumer purchases 40 peaches, the MRS is still 1.

A Peach of a Problem





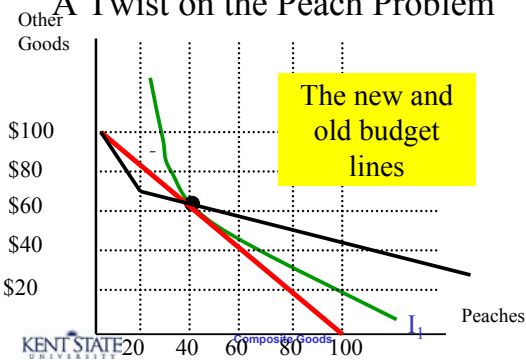
A Twist on the Peach Problem

- Suppose she had been offered another deal. The first twenty would cost \$1.50 and the rest 50¢. Should she take *that* deal?

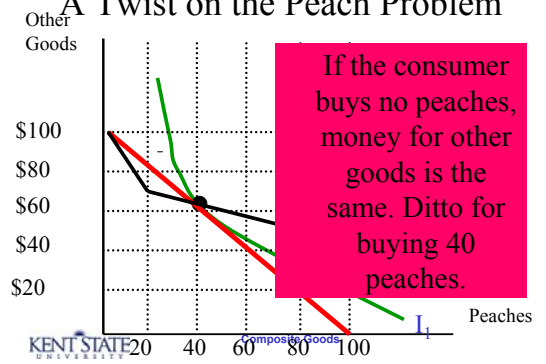
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- Suppose she had been offered another deal. The first twenty would cost \$1.50 and the rest 50¢. Should she take *that* deal?
- Again this is a take it or leave it deal.

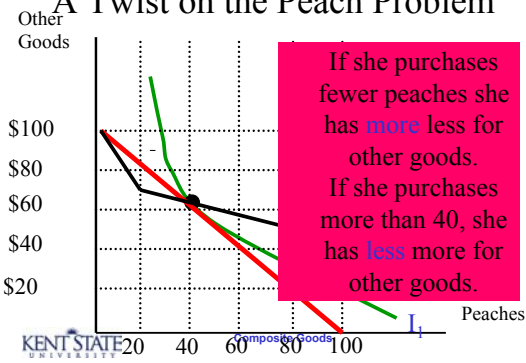
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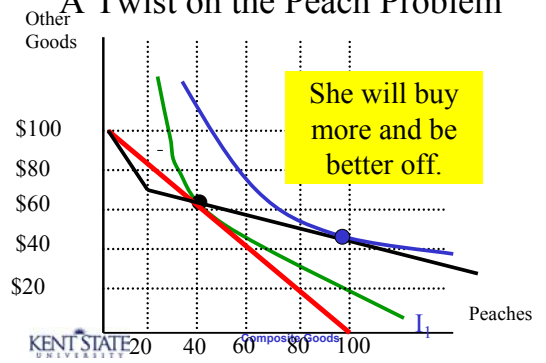
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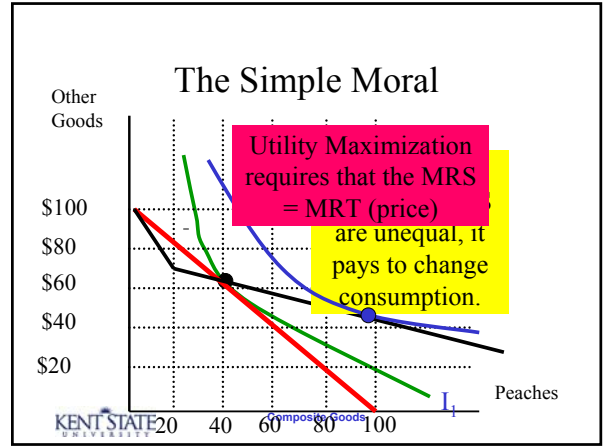
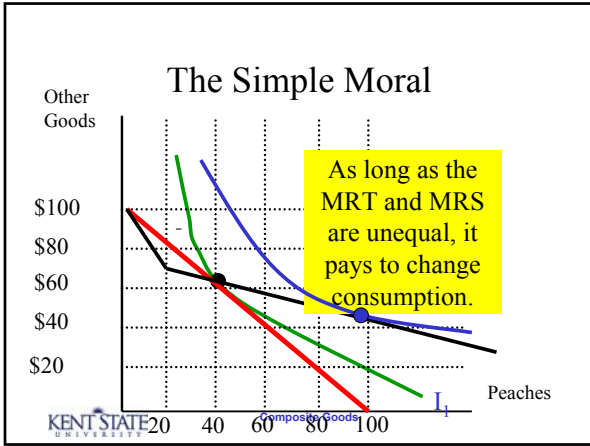


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End

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KENT STATE UNIVERSITY Composite Goods