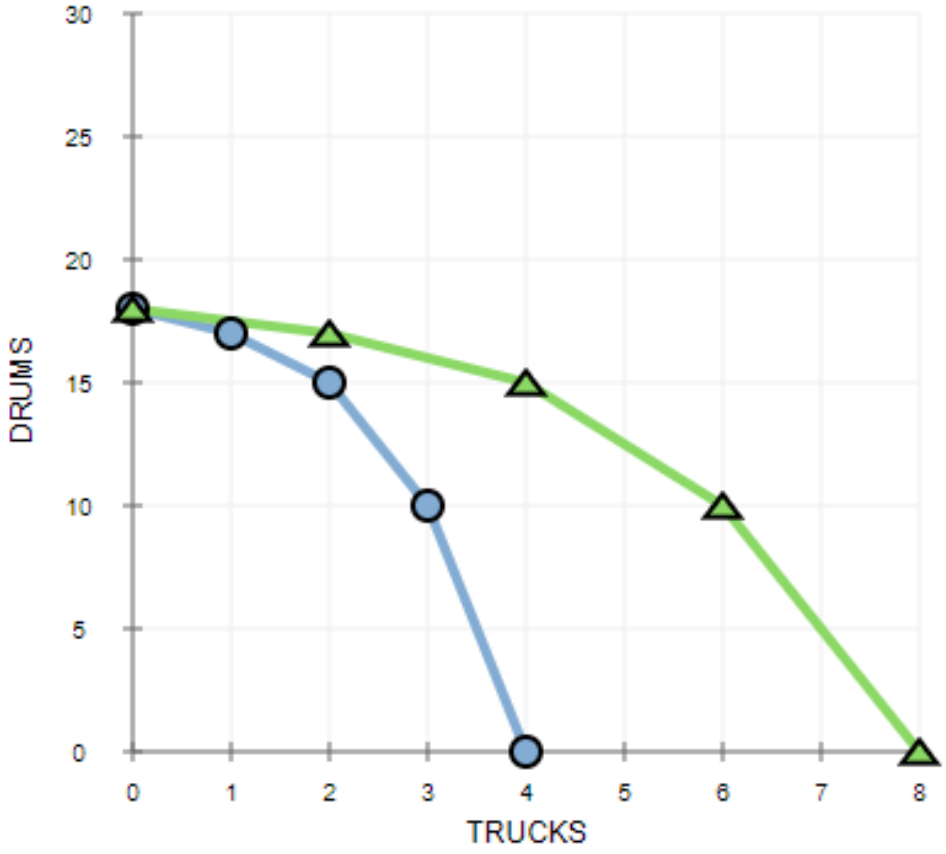
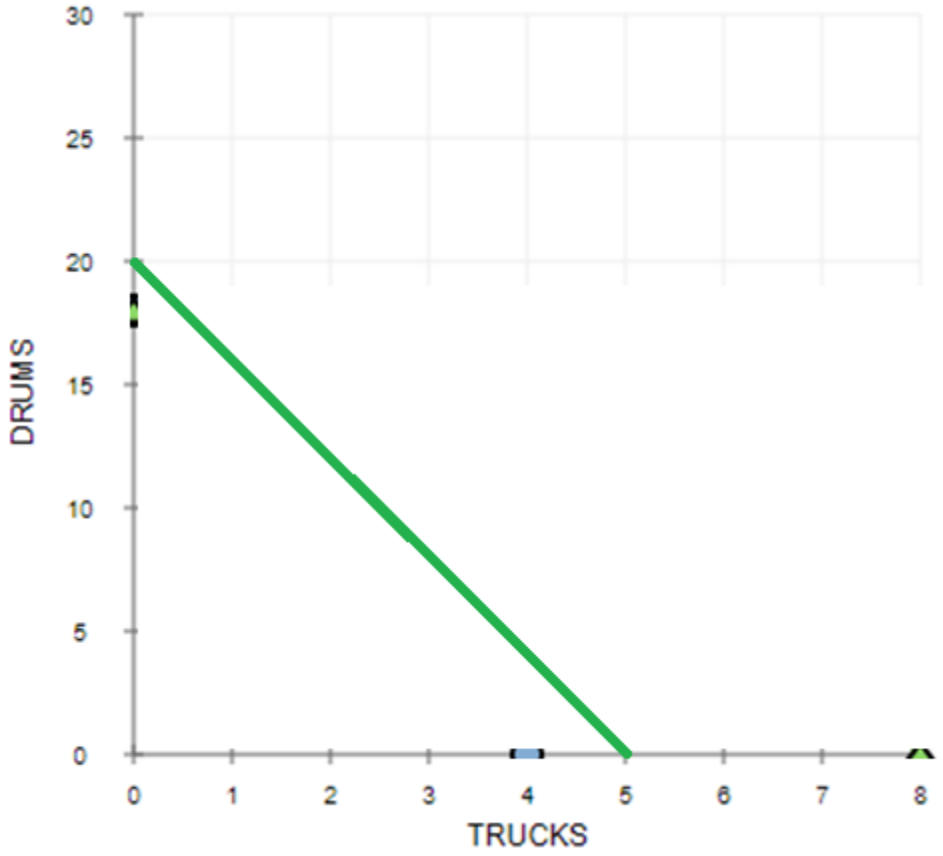
PPF and the opportunity cost

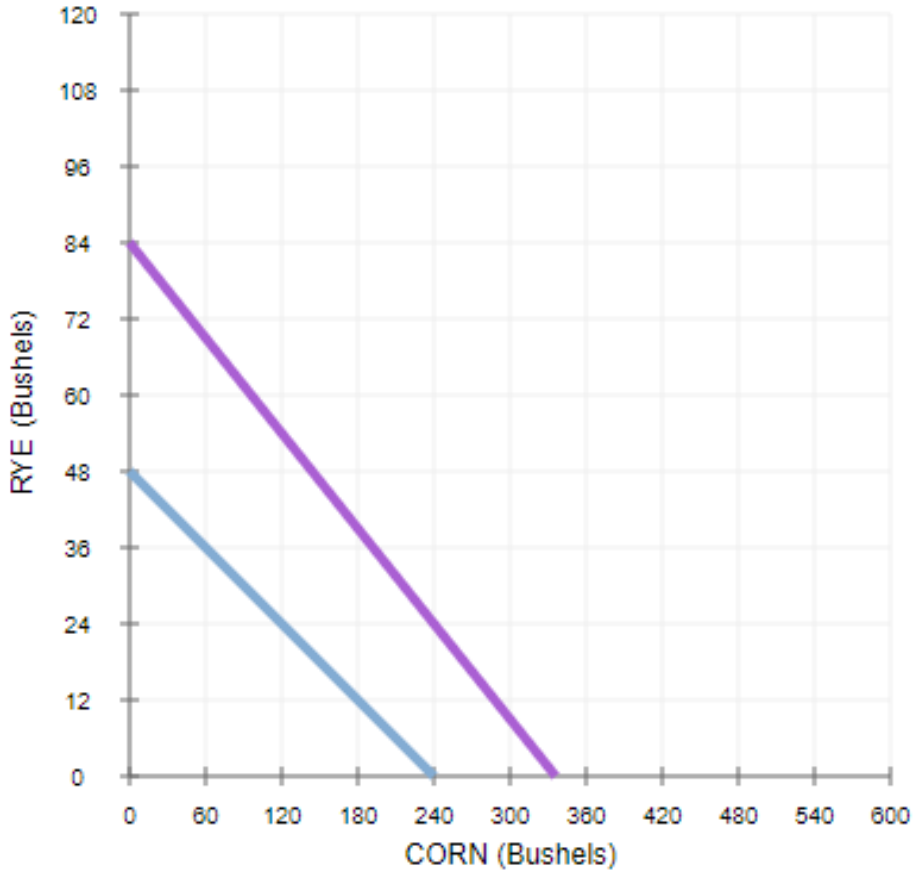


Choice	Hours Producing (Trucks)	Hours Producing (Drums)	Produced (Trucks)	Produced (Drums)
A	8	0	4	0
B	6	2	3	10
C	4	4	2	15
D	2	6	1	17
E	0	8	0	18

PPF and the opportunity cost



Example: opportunity cost



	Corn (Bushels per acre)	Rye (Bushels per acre)
Kevin	20	4
Maria	28	7

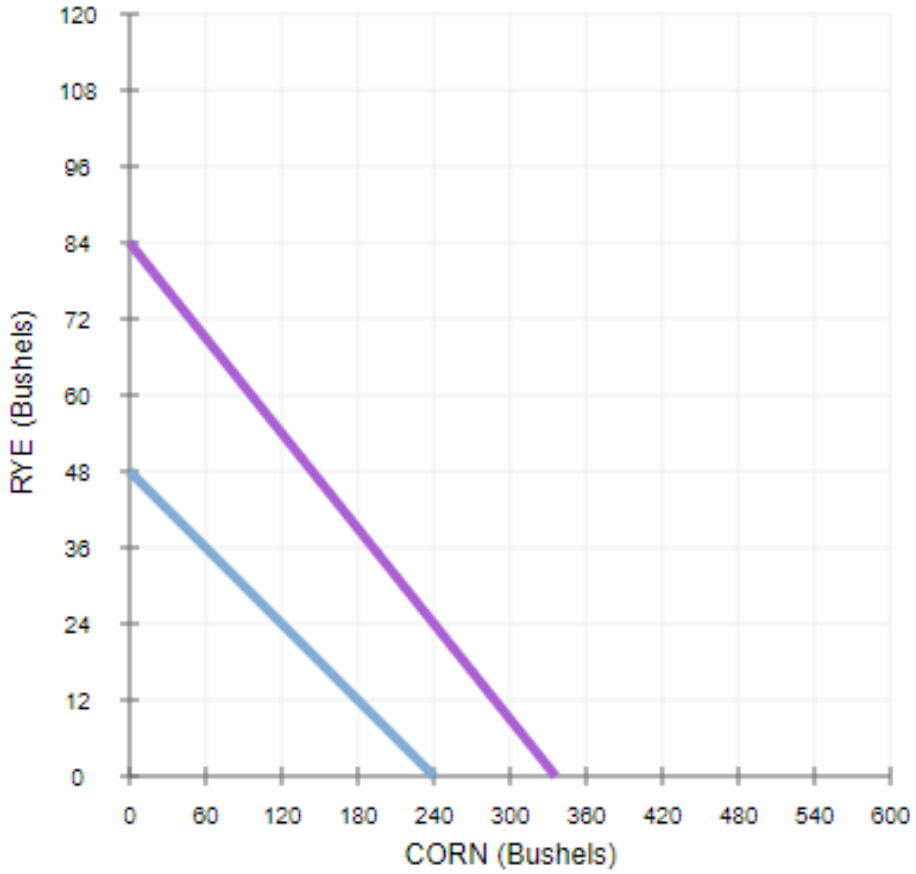
Each one owns a 12-acre plot of land.

Kevin's opportunity cost.

Corn:

Rye:

Example: opportunity cost



	Corn (Bushels per acre)	Rye (Bushels per acre)
Kevin	20	4
Maria	28	7

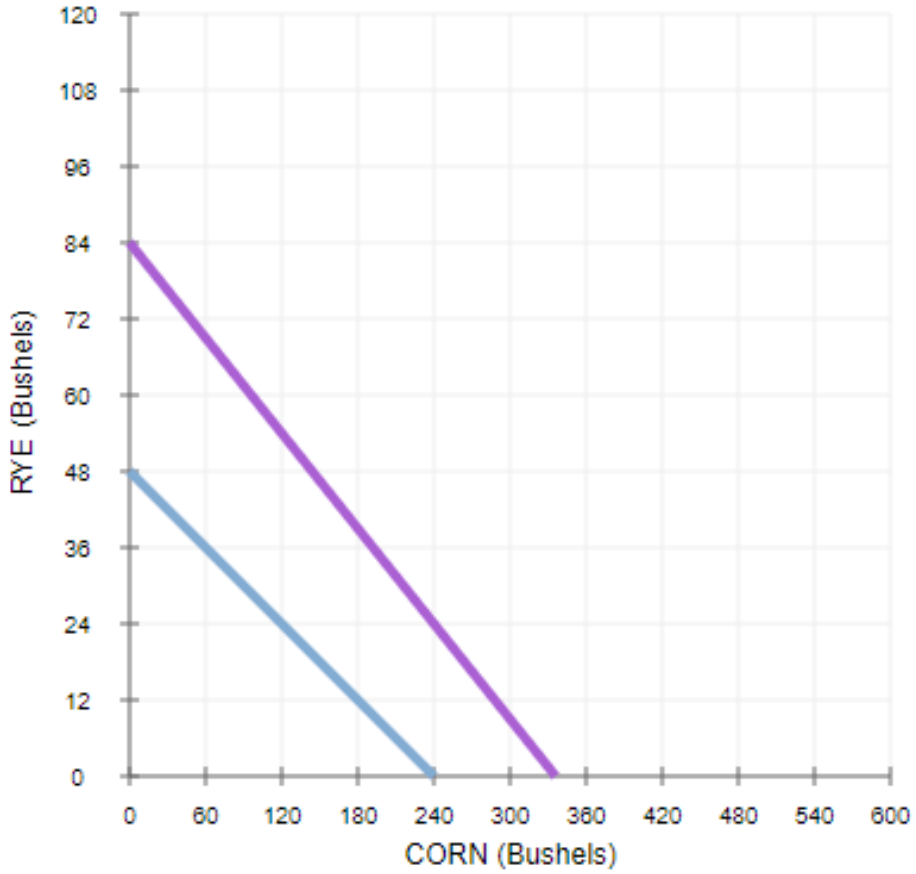
Each one owns a 12-acre plot of land.

Maria's opportunity cost.

Corn:

Rye:

Example: comparative advantage



	Corn (Bushels per acre)	Rye (Bushels per acre)
Kevin	20	4
Maria	28	7

Kevin's opportunity cost.

Corn: 4/20=1/5

Rye: 20/4=5

Maria's opportunity cost.

Corn: 7/28=1/4

Rye: 28/7=4

Thursday class

Benefits of trade…

Example: benefits of trade

Country	Corn (Bushels per hour of labor)	Jeans (Pairs per hour of labor)
Euphoria	4	16
Contente	6	12

They each have 4 million labor hours available per week that they can use to produce corn, jeans, or a combination of both.

Contente

Corn: 1M hrs labor => 6M corn
Jeans: 3M hrs labor => 36M jeans

Euphoria

Corn: 3M hrs labor => 12M corn
Jeans: 1M hrs labor => 16M jeans

Example: benefits of trade

Country	Corn (Bushels per hour of labor)	Jeans (Pairs per hour of labor)
Euphoria	4	16
Contente	6	12

Contente's opportunity cost

Corn: 12/6 = 2
Jeans: 6/12 = 1/2

Euphoria's opportunity cost

Corn: 16/4 = 4
Jeans: 4/16 = 1/4

Example: benefits of trade

Country	Corn (Bushels per hour of labor)	Jeans (Pairs per hour of labor)
Euphoria	4	16
Contente	6	12

Contente's opportunity cost

Corn: 12/6 = 2 ⟸ **Comparative advantage in the production of corn**

Jeans: 6/12 = 1/2

Euphoria's opportunity cost

Corn: 16/4 = 4

Jeans: 4/16 = 1/4 ⟸ **Comparative advantage in the production of jeans**

Example: benefits of trade

Country	Corn (Bushels per hour of labor)	Jeans (Pairs per hour of labor)
Euphoria	4	16
Contente	6	12

Suppose that each country completely specializes in the production of the good in which it has a comparative advantage, producing **only** that good.

Contente's production under specialization:

Corn: 6*4 = **24**
Jeans: 12*0 = 0

Euphoria's production under specialization:

Corn: 4*0 = 0
Jeans: 16*4 = **64**

Example: benefits of trade

Suppose the country that produces corn trades **14 million bushels of corn** to the other country in exchange for **42 million pairs of jeans**.

	Euphoria		Contente	
	Corn (*Millions of bushels*)	Jeans (*Millions of pairs*)	Corn (*Millions of bushels*)	Jeans (*Millions of pairs*)
Without Trade				
Production	12	16	6	36
Consumption	12	16	6	36
With Trade				
Production	0	64	24	0
Trade action	Imports 14	Exports 42	Exports 14	Imports 42
Consumption	14	22	10	42
Gains from Trade				
Increase in Consumption	2	6	4	6

Countries **did not** specialize

Corn: 18 million bushels
Jeans: 52 million pairs

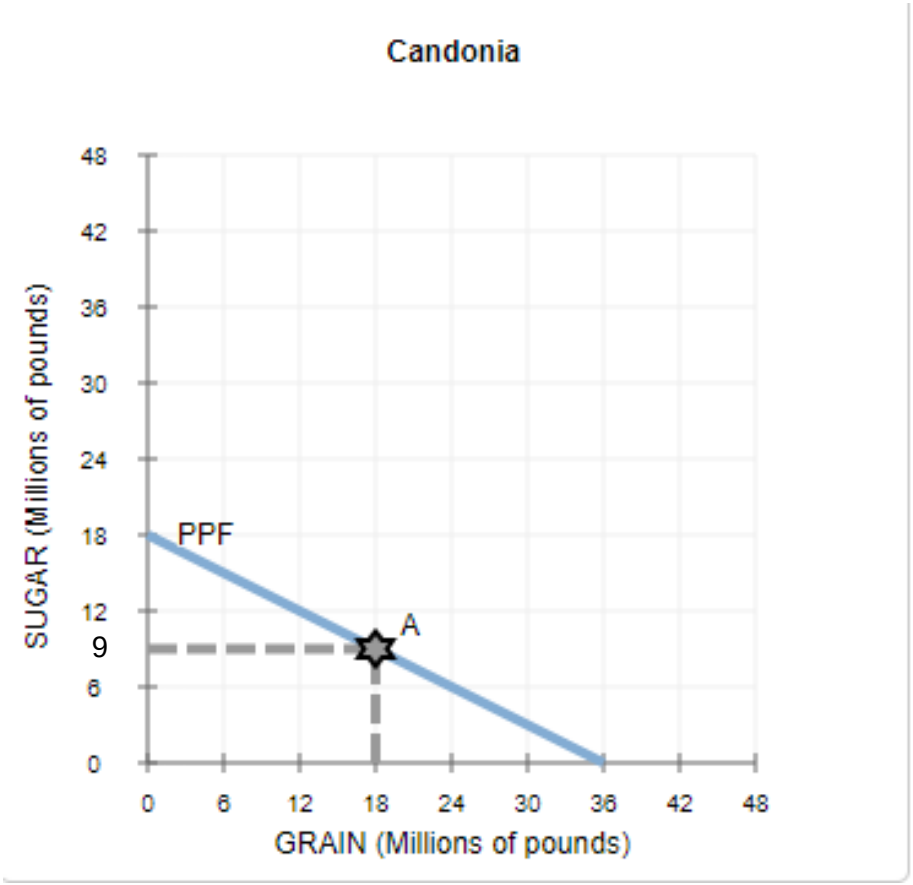
Countries **did** specialize

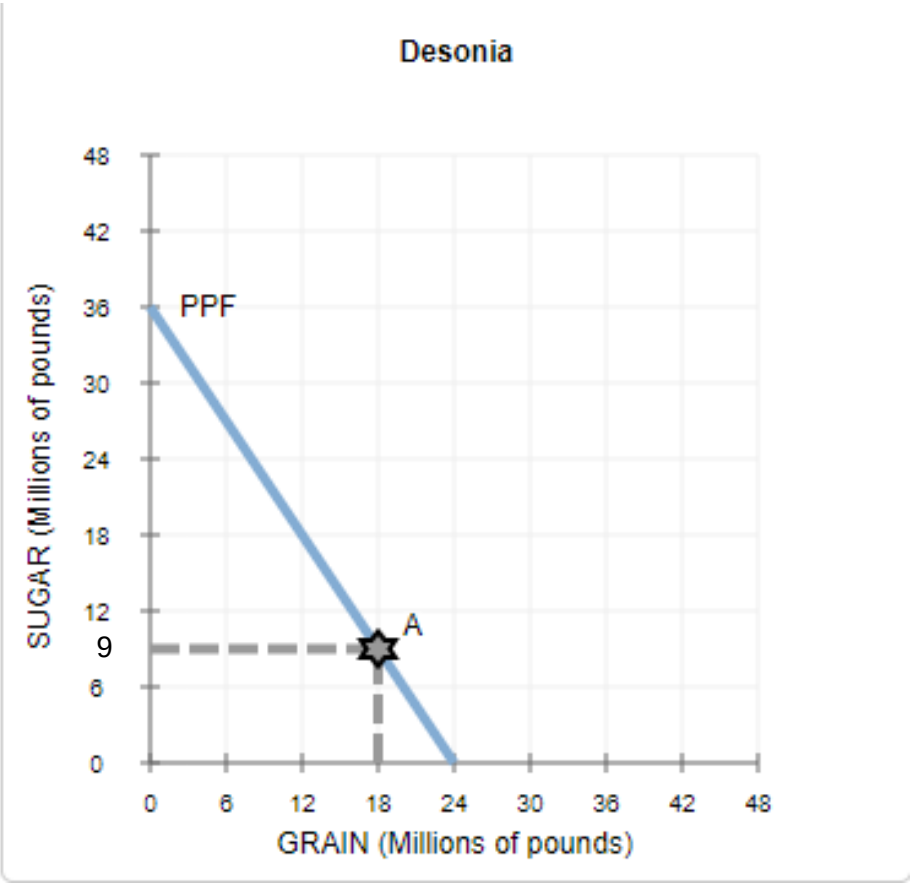
Corn: 24 million bushels
Jeans: 64 million pairs

Gains

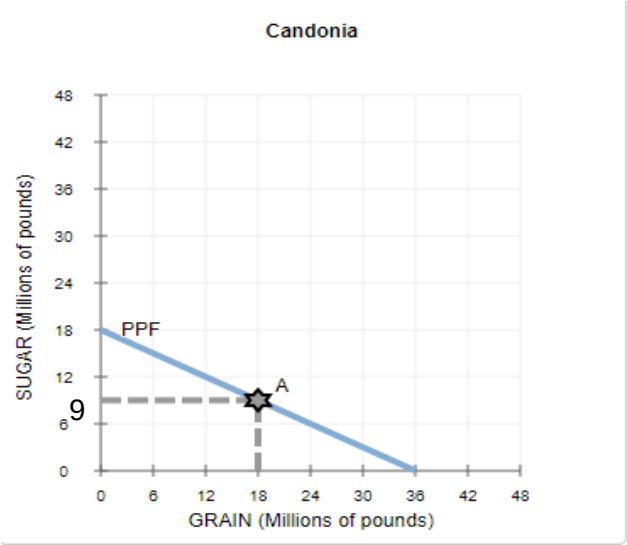
Corn: 6 M
Jeans: 12 M

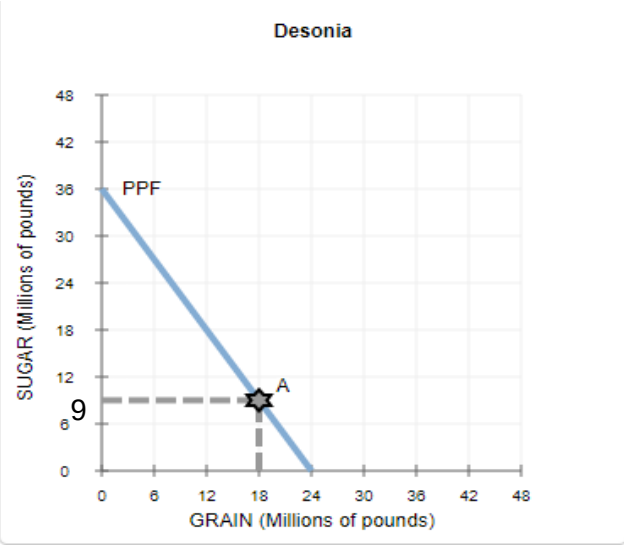
Example: Specialization and trade





Example: Specialization and trade





Candonia's opportunity cost

Sugar: 36/18 = 2
Grain: 18/36 = 1/2

Candonia's production under specialization:

Sugar : 0
Grain : **36**

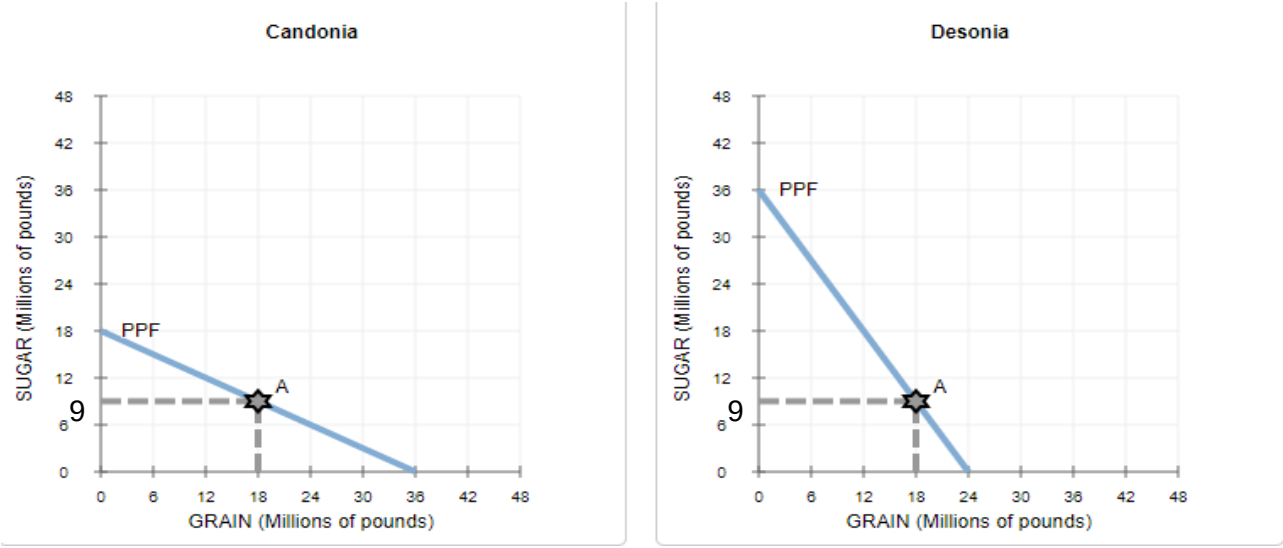
Desonia's opportunity cost

Sugar: 24/36 = 2/3
Grain: 36/24 = 3/2

Desonia's production under specialization:

Sugar : **36**
Grain : 0

Example: Specialization and trade



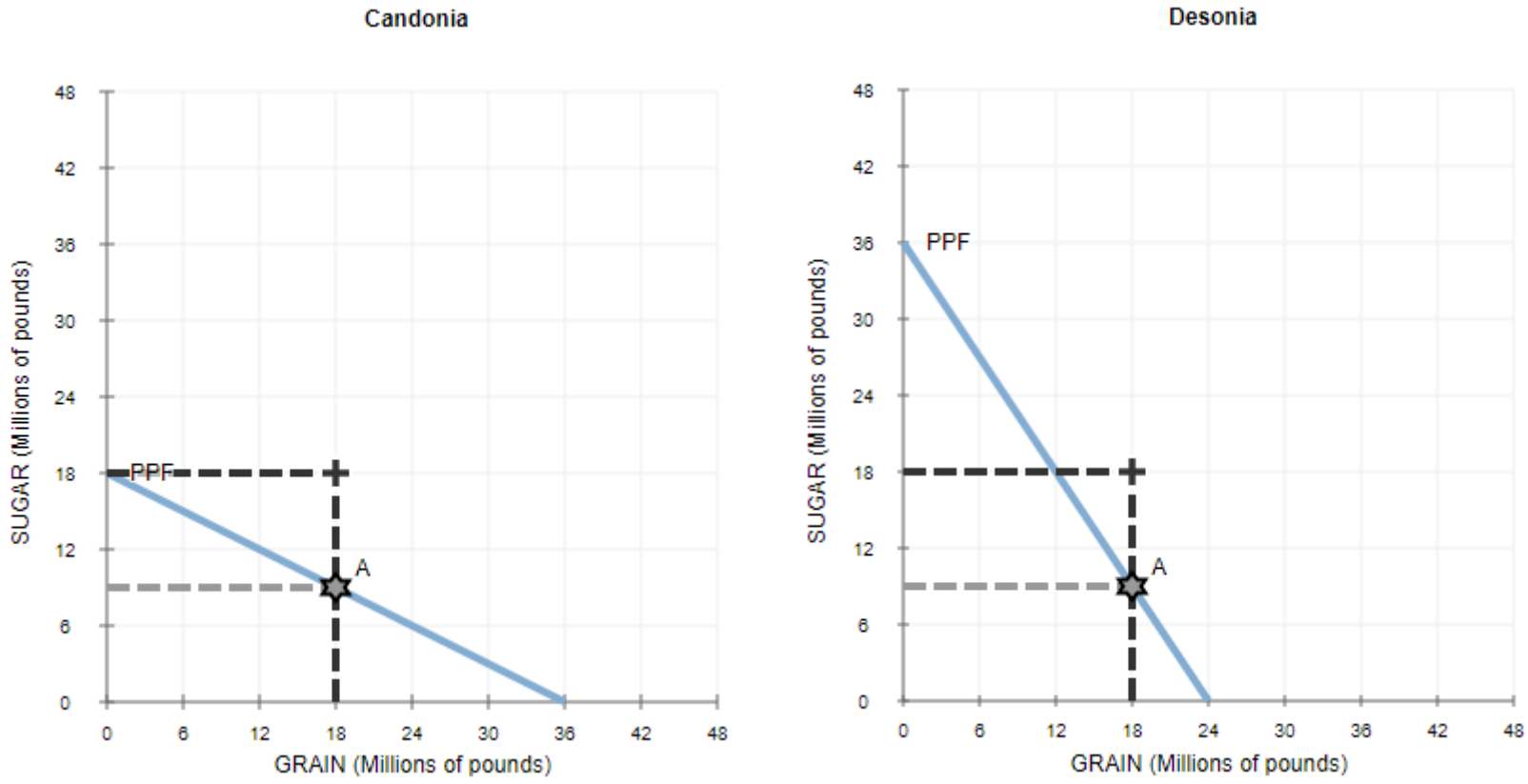
The countries decide to exchange 18 million pounds of grain for 18 million pounds of sugar.

This ratio of goods is known as the **price of trade** between Candonia and Desonia.

Price of trade = 18/18 = 1

(1/2 > Price of trade > 3/2)
(2/3 > Price of trade > 2/1)

Example: Specialization and trade



Without engaging in international trade, Candonia and Desonia **would not** have been able to consume at the after-trade consumption bundles.