
Comparative Advantage and Gains from Trade

Two Instructive Numerical Examples

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Example 1

A two-country, two-good, two-input example in which *one country has comparative advantage in the production of both goods* while *the other country has absolute advantage in both goods*.

Country A

Country A	Input requirements	
	Fish	Coconuts
Labor	3 hours/lb	1 hours/lb
Capital	2 units/lb	6 units/lb

	Resources
Labor	12 hours
Capital	24 units

Country B

Country B	Input requirements	
	Fish	Coconuts
Labor	6 hours/lb	12 hours/lb
Capital	6 units/lb	6 units/lb

	Resources
Labor	60 hours
Capital	24 units

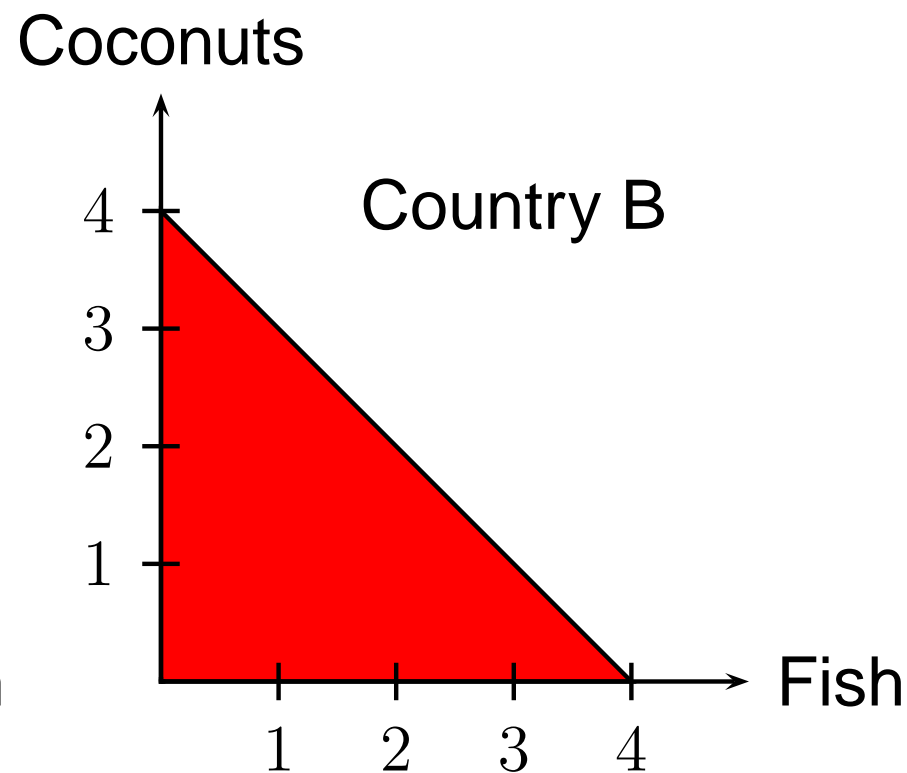
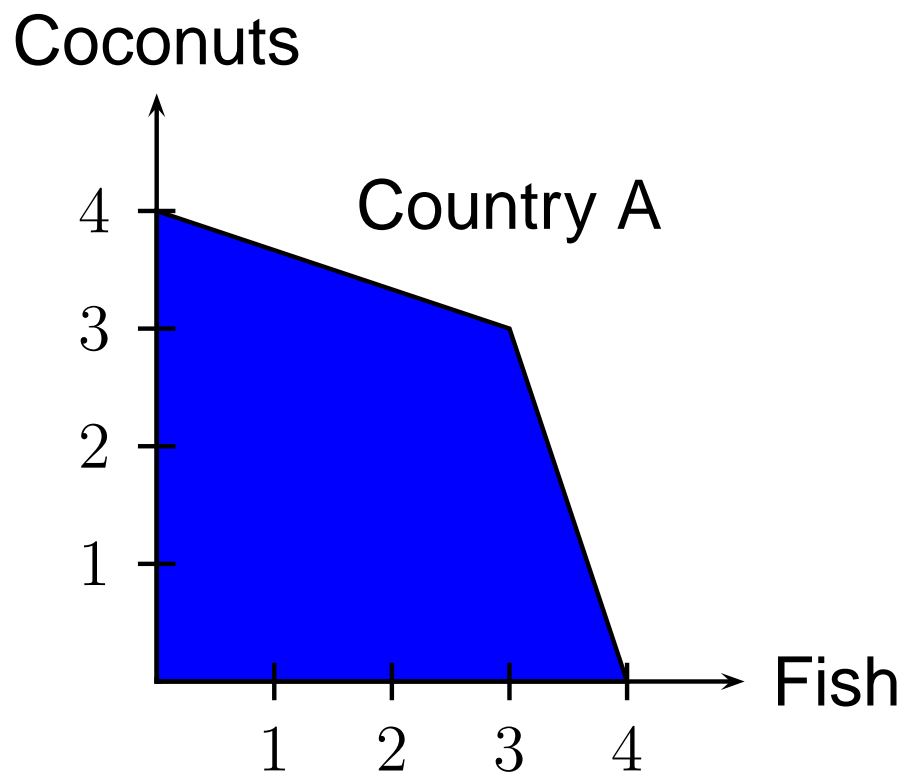
Technology

Country A	Input requirements	
	Fish	Coconuts
Labor	3 hours/lb	1 hours/lb
Capital	2 units/lb	6 units/lb

Country B	Input requirements	
	Fish	Coconuts
Labor	6 hours/lb	12 hours/lb
Capital	6 units/lb	6 units/lb

Note that country A has an absolute advantage in the production of both goods.

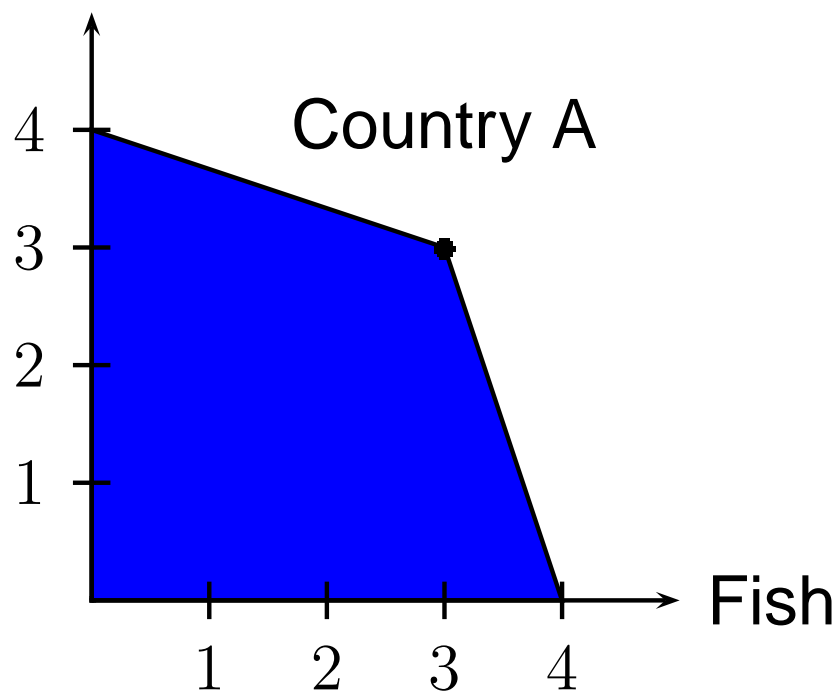
The Production Possibilities Sets



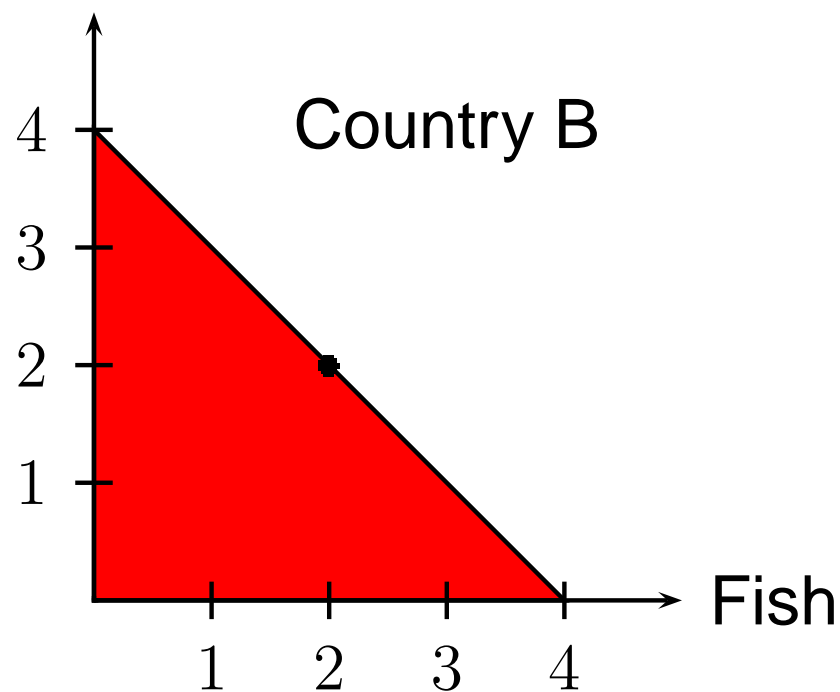
The status quo

Assume that country A is producing 3 units of each commodity and that country B is producing 2 units of each commodity.

Coconuts



Coconuts



Comparative Advantage

In order to check which country has comparative advantage in which good, we need to calculate their respective opportunity costs.

- Country A's opportunity cost of fish is 3 coconuts per fish. Country A's opportunity cost of coconuts is 3 fish per coconut.
- Country B's opportunity cost of fish is 1 coconut per fish. Country B's opportunity cost of coconuts is 1 fish per coconut.

We can see that although country A has an absolute advantage in the production of both goods, country B has a comparative advantage in both goods.

Example 2

Example of a case in which one country has comparative advantage in one good, the other country has comparative advantage in the other good, but still there are no benefits from trade.

Country A

Country A	Input requirements	
	Fish	Coconuts
Labor	3 hours/lb	1 hours/lb
Capital	2 units/lb	4 units/lb

	Resources
Labor	15 hours
Capital	20 units

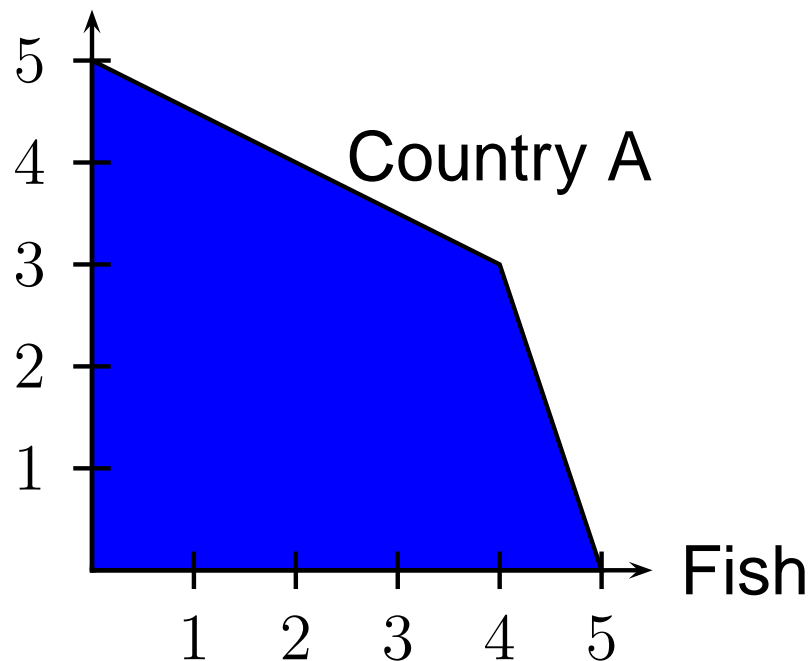
Country B

Country B	Input requirements	
	Fish	Coconuts
Labor	1 hours/lb	3 hours/lb
Capital	4 units/lb	2 units/lb

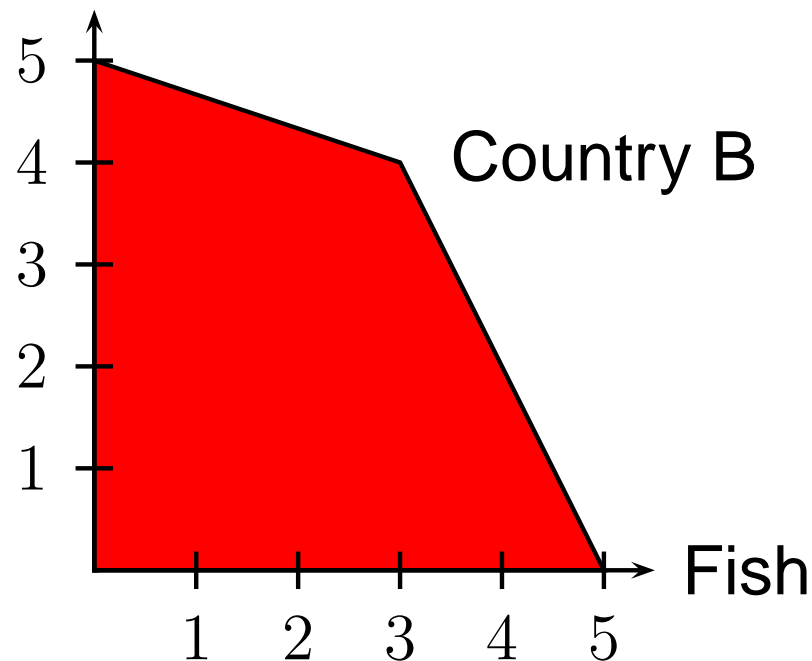
	Resources
Labor	15 hours
Capital	20 units

The Production Possibilities Sets

Coconuts

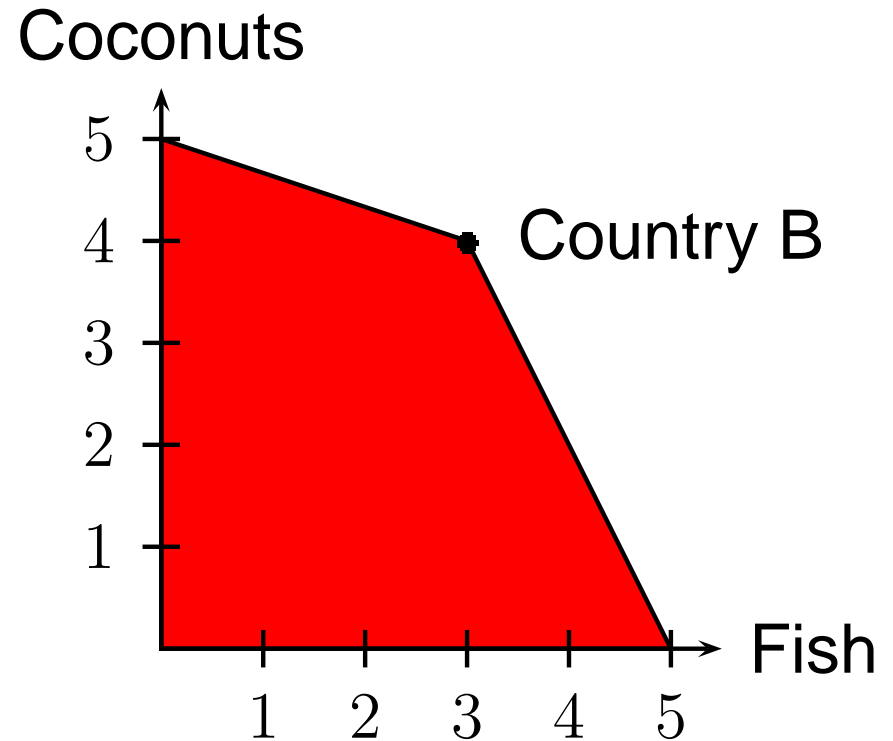
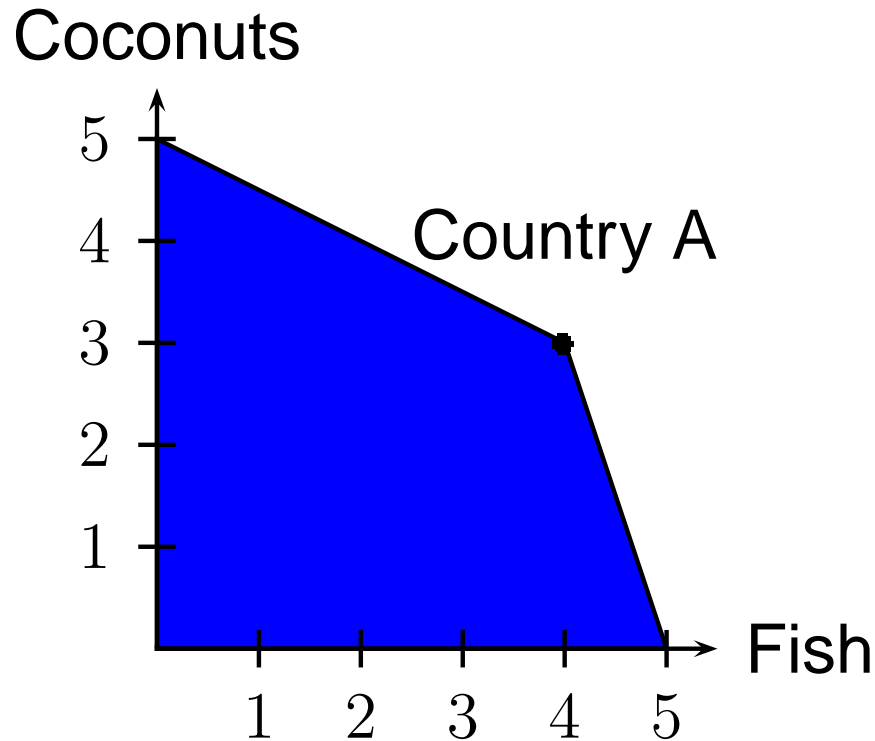


Coconuts



The status quo

Assume that country A is producing 4 units fish and 3 units of coconuts, and that country B is producing 3 units of fish and 4 units of coconuts.



Comparative Advantage

In order to check which country has comparative advantage in which good, we need to calculate their respective opportunity costs.

- Country A's opportunity cost of fish is 3 coconuts per fish. Country A's opportunity cost of coconuts is 2 fish per coconut.
- Country B's opportunity cost of fish is 2 coconuts per fish. Country B's opportunity cost of coconuts is 3 fish per coconuts.

We can see that country B has a comparative advantage in the production of fish and country A has comparative advantage in the production of coconuts. However, there are no benefits from trade.