

E101 - 1.3 - Comparative Advantage

Comparative Advantage - The advantage that comes from producing something at the lower opportunity than others are able to.

Trade - Everyone is better off*.

Output per worker by Country and Industry

Number of Kilograms per day per person

	Spinach	or	Carrots
Canada	3	or	2
USA	1	or	4

Canada* - 10 Million People

USA* - 10 Million People

Total Output Before Trade			Total Output After Trade		
Number of Kilograms per day (millions)					
	Spinach	Carrots		Spinach	Carrots
Canada	15	10	Canada	30	0
USA	<u>5</u>	<u>20</u>	USA	<u>0</u>	<u>40</u>
Total	20	30	Total	30	40
Half People Each Industry			All People in One Industry		

$$\frac{10}{2} = 5 \quad 3 \times 5 = 15 \quad 2 \times 5 = 10 \quad 3 \times 10 = 30$$

$$1 \times 5 = 5 \quad 4 \times 5 = 20 \quad 4 \times 10 = 40$$

$$\text{Canada Opportunity Cost of 1 Spinach} = \frac{2 \text{ kg Carrots}}{3 \text{ kg Spinach}} = \frac{0.66 \text{ kg Carrots}}{1 \text{ kg Spinach}}$$

Canada has a Comparative Advantage in Spinach.

$$0.66 < 4$$

$$\text{Canada Opportunity Cost of 1 Carrots} = \frac{3 \text{ kg Spinach}}{2 \text{ kg Carrots}} = \frac{1.5 \text{ kg Spinach}}{1 \text{ kg Carrots}}$$

$$\text{USA Opportunity Cost of 1 Spinach} = \frac{4 \text{ kg Carrots}}{1 \text{ kg Spinach}}$$

USA has a Comparative Advantage in Carrots.

$$0.25 < 1.5$$

$$\text{USA Opportunity Cost of 1 Carrots} = \frac{1 \text{ kg Spinach}}{4 \text{ kg Carrots}} = \frac{0.25 \text{ kg Spinach}}{1 \text{ kg Carrots}}$$

Absolute Advantage - A comparative advantage in both industries.

International Trade

Terms of Trade - The average price of the country's exports compared the price of its imports.

$$\text{Terms of Trade} = \frac{\text{average price of exports}}{\text{average price of imports}} \times 100$$