

Trade Assessment Questions

Section 1: Multiple Choice

1. Ireland produces two commodities – potatoes and sausages. Table 1 shows Ireland’s Production Possibilities Schedule for the two commodities.

Table 1: Ireland’s Production Possibilities Schedule

Ireland – Production Possibilities Schedule	
Potatoes (pounds per week)	Sausage (pounds per week)
0	150
1000	0

The opportunity cost for Ireland to produce one pound of sausage is:

- a. 1000 pounds of potatoes.
 - b. 150 pounds of potatoes.
 - c. $6 \frac{2}{3}$ pounds of potatoes.
 - d. $\frac{3}{20}$ pounds of potatoes.
2. The opportunity cost for Ireland to produce one pound of potatoes is:
 - a. 1000 pounds of sausage.
 - b. 150 pounds of sausage.
 - c. $6 \frac{2}{3}$ pounds of sausage.
 - d. $\frac{3}{20}$ pounds of sausage.
 3. Which of the following combinations of pounds of sausage and pounds of potatoes is not possible for Ireland to produce in one week?
 - a. 1000 pounds of potatoes and 0 pounds of sausage.
 - b. 750 pounds of potatoes and 50 pounds of sausage.
 - c. 500 pounds of potatoes and 75 pounds of sausage.
 - d. 150 pounds of sausage and 0 pounds of potatoes.

Trade Assessment Questions

4. Scotland also produces two commodities – potatoes and sausages. Table 2 shows Scotland’s Production Possibilities Schedule for the two commodities.

Table 2: Scotland’s Production Possibilities Schedule

Scotland – Production Possibilities Schedule	
Potatoes (pounds per week)	Sausage (pounds per week)
0	250
200	0

The opportunity cost for Scotland to produce one pound of sausage is:

- a. 4/5 pounds of potatoes.
 - b. 1 1/4 pounds of potatoes.
 - c. 200 pounds of potatoes.
 - d. 250 pounds of potatoes.
5. The opportunity cost for Scotland to produce one pound of potatoes is:
- a. 4/5 pounds of sausage.
 - b. 1 1/4 pounds of sausage.
 - c. 200 pounds of sausage.
 - d. 250 pounds of sausage.
6. Which of the following combinations of pounds of sausage and pounds of potatoes is not possible for Scotland to produce in one week?
- a. 200 pounds of potatoes and 0 pounds of sausage.
 - b. 40 pounds of potatoes and 200 pounds of sausage.
 - c. 100 pounds of potatoes and 150 pounds of sausage.
 - d. 250 pounds of sausage and 0 pounds of potatoes.
7. Ireland has the comparative advantage at producing _____ and Scotland has the comparative advantage at producing _____.
- a. potatoes, sausage
 - b. sausage, potatoes
 - c. potatoes, potatoes
 - d. sausage, sausage
8. If the two countries were to trade and take advantage of their comparative advantage _____ would be a supplier of sausage while _____ would be a supplier of potatoes.
- a. Ireland, Scotland
 - b. Scotland, Ireland
 - c. Ireland, Ireland
 - d. Scotland, Scotland

Trade Assessment Questions

9. (Tricky) If the two countries were to trade, which of the following exchange rates would be agreeable to both countries?
- 1 pound of potatoes trades for 1 pound of sausage and 1 pound of sausage trades for 1 pound of potatoes.
 - 1 pound of potatoes trades for 2 pounds of sausage and 1 pound of sausage trades for $\frac{1}{2}$ a pound of potatoes.
 - 1 pound of sausage trades for 10 pounds of potatoes and 1 pound of potatoes trades for $\frac{1}{10}$ of a pound of sausage.
 - 1 pound of sausage trades for 20 pounds of potatoes and 1 pound of potatoes trades for $\frac{1}{20}$ of a pound of sausage.
10. (Tricky) If the two countries were to trade, which of the following exchange rates would not be agreeable to both countries?
- 1 pound of potatoes trades for 1 pound of sausage and 1 pound of sausage trades for 1 pound of potatoes.
 - 1 pound of potatoes trades for $\frac{3}{20}$ pounds of sausage and 1 pound of sausage trades for $6\frac{2}{3}$ pounds of potatoes.
 - 1 pound of sausage trades for $\frac{4}{5}$ pounds of potatoes and 1 pound of potatoes trades for $1\frac{1}{4}$ of a pound of sausage.
 - 1 pound of sausage trades for 20 pounds of potatoes and 1 pound of potatoes trades for $\frac{1}{20}$ of a pound of sausage.
11. Comparative advantage represents:
- The ability to produce a better good than another country.
 - The ability to produce more of a good than another country.
 - The ability to produce everything your country needs without trade.
 - The ability to produce a good at a lower opportunity cost than another country.
12. Specialization occurs when:
- A country decides to produce more of a good in which it has a comparative advantage and trade it for a good in which another country has a comparative advantage.
 - A country decides to produce all of the goods it needs and not trade with other countries.
 - A country decides to produce the good that is most expensive and sell it to other countries.
 - A country decides to erect barriers to trade in order to keep out goods that other countries can produce at a lower opportunity cost.
13. The opportunity cost of producing a good represents:
- The time it takes to produce a good.
 - The capital it takes to produce a good.
 - Whatever must be given up to produce a good.
 - The amount of money it takes to produce a good.

Trade Assessment Questions

Answers:

1. c
2. d
3. b
4. a
5. b
6. c
7. a
8. b
9. a
10. d
11. d
12. a
13. c

Trade Assessment Questions

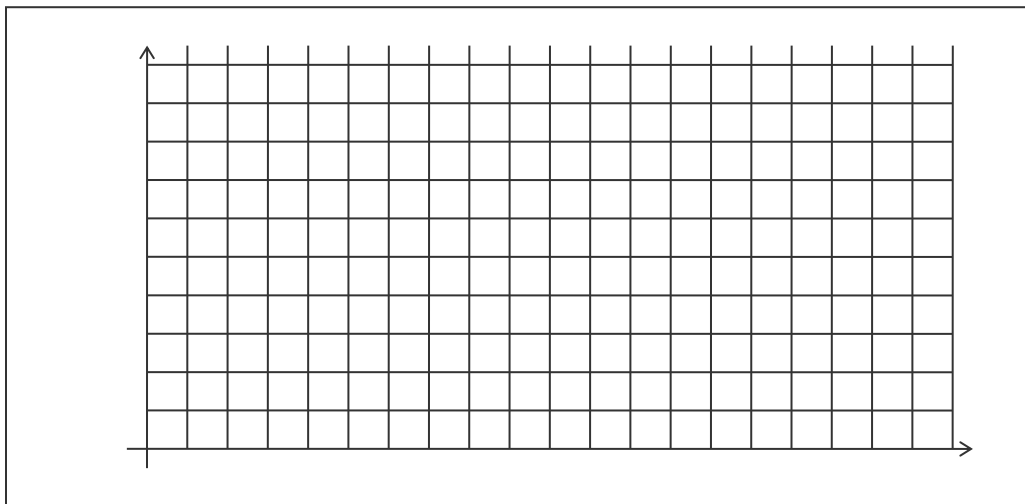
Section 2: Written Response (AP Level)

1. Ireland produces two commodities – potatoes and sausages. Table 1 shows Ireland’s Production Possibilities Schedule for the two commodities.

Table 1: Ireland’s Production Possibilities Schedule

Ireland – Production Possibilities Schedule	
Potatoes (pounds per week)	Sausage (pounds per week)
0	150
200	120
400	90
600	60
800	30
1000	0

- a. In the space below draw Ireland’s Production Possibilities Frontier that describes the possible combination of potatoes and sausages it can produce in a week. Label your graph completely.



- b. What is Ireland’s opportunity cost of producing 1 pound of potatoes?
- c. What is Ireland’s opportunity cost of producing 1 pound of sausage?

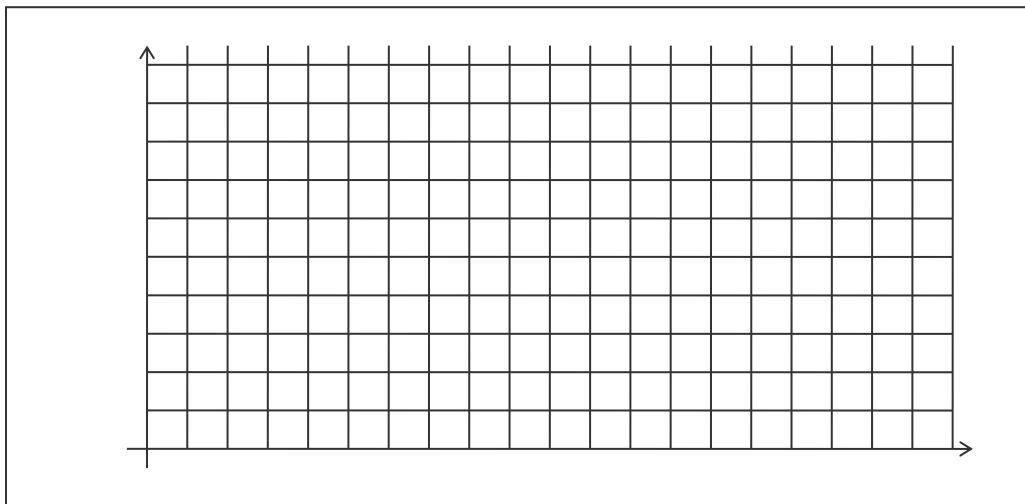
Trade Assessment Questions

2. Scotland also produces two commodities – potatoes and sausages. Table 2 shows Scotland’s Production Possibilities Schedule for the two commodities.

Table 2: Scotland’s Production Possibilities Schedule

Scotland – Production Possibilities Schedule	
Potatoes (pounds per week)	Sausage (pounds per week)
0	250
40	200
80	150
120	100
160	50
200	0

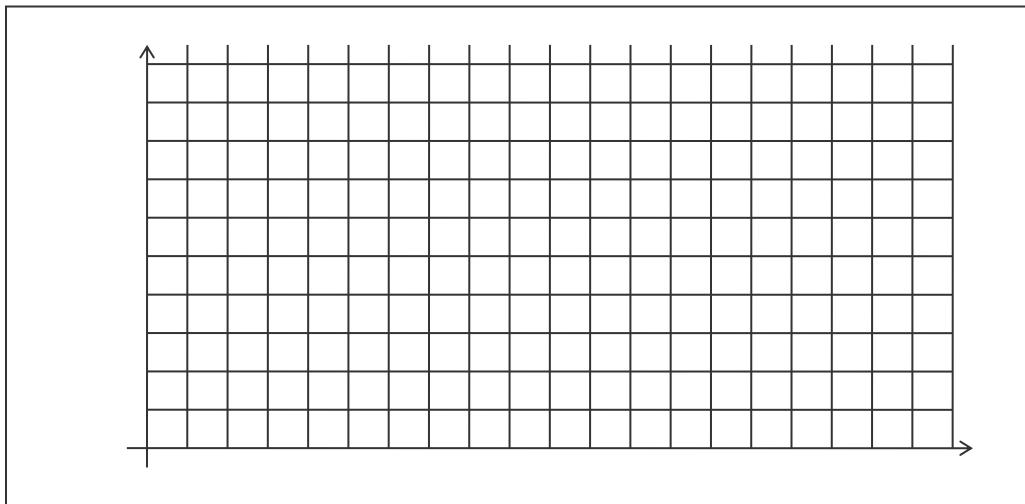
- a. In the space below draw Scotland’s Production Possibilities Frontier that describes the possible combination of potatoes and sausages it can produce in a week. Label your graph completely.



- b. What is Scotland’s opportunity cost of producing 1 pound of potatoes?
- c. What is Scotland’s opportunity cost of producing 1 pound of sausage?
3. Which country has the comparative advantage at producing potatoes? Why?
4. Which country has the comparative advantage at producing sausage? Why?

Trade Assessment Questions

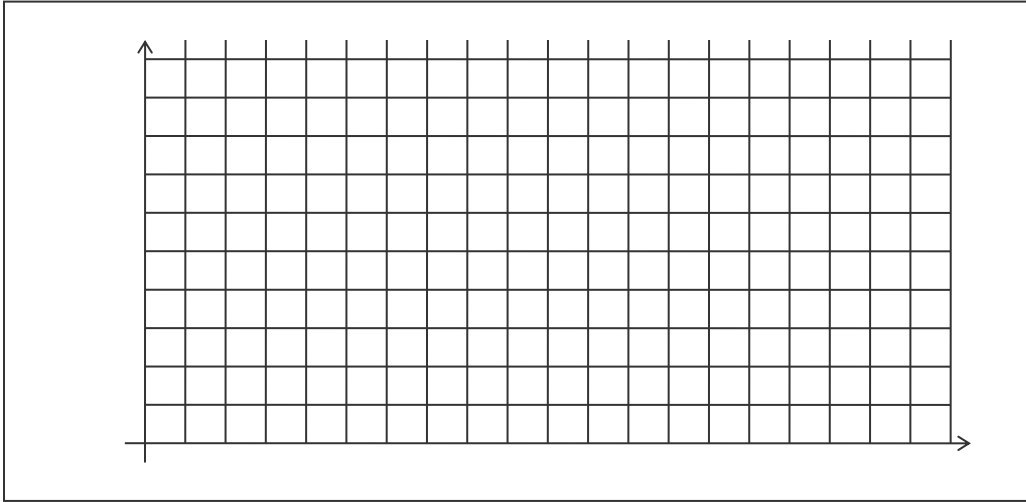
5. What is the greatest number of pounds of potatoes the two countries could produce together in a week?
6. What is the greatest number of pounds of sausage the two countries could produce together in a week?
7. If both countries specialized and produced the commodity in which they had the comparative advantage how many pounds of potatoes and sausage would the two countries produce in a week?
8. In the space below graph the combined Production Possibilities Frontier if both Ireland and Scotland were to combine their output (this demonstrates a "Global" Production Possibilities Frontier with trade).



9. Ireland and Scotland decide to trade. They agree that the price of one pound of sausage will be two pounds of potatoes. Which country will be the supplier of potatoes? Explain.
10. Which country will be the supplier of sausage? Explain.

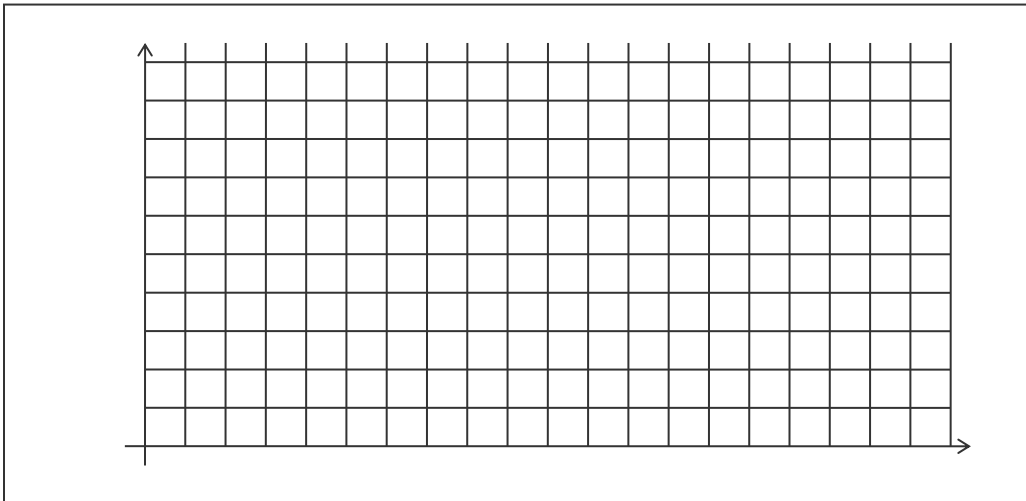
Trade Assessment Questions

11. In the space below graph the possible consumption combinations available to Ireland with trade.



12. Does trade give Ireland the ability to consume more pounds of potatoes and sausage than it could have without trade? Explain.

13. In the space below graph the possible consumption combinations available to Scotland with trade.



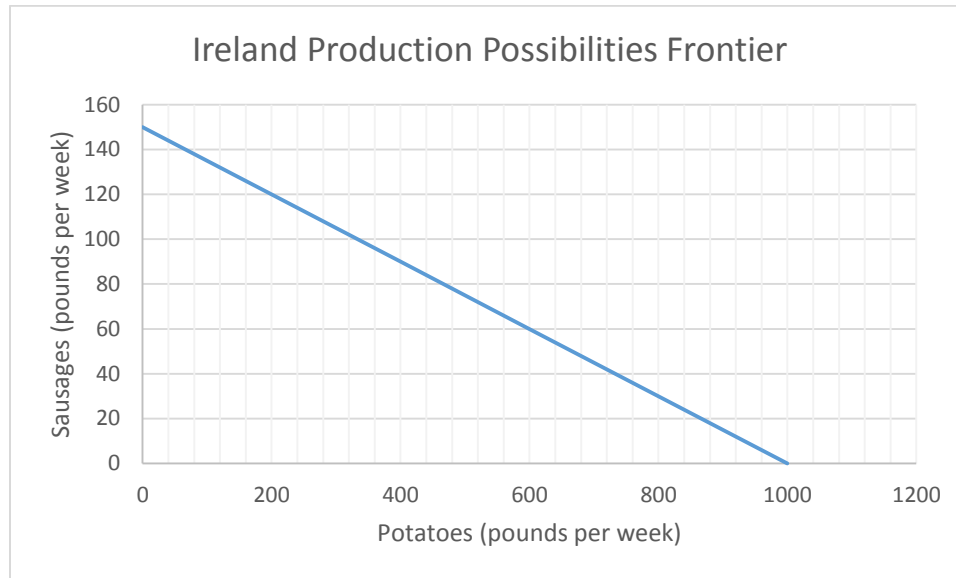
14. Does trade give Scotland the ability to consume more pounds of potatoes and sausage than it could have without trade? Explain.

Answers:

1. Ireland

a. Production Possibilities Frontier:

It does not matter which axis represents the sausage or potatoes. As long as each axis is labeled and has the correct numbers the Production Possibilities Frontier has the correct information.



b. Ireland's opportunity cost of producing 1 pound of potatoes can be found by dividing the number of pounds of sausage Ireland gives up by the number of pounds of potatoes it gets when moving down between any two rows of Ireland's Production Possibilities Schedule (Table 1):

- i. First two rows: Ireland goes from producing 150 pounds of sausage per week to producing 120 pounds of sausage per week. Thus it gives up 30 pounds of sausage per week. Ireland goes from producing 0 pounds of potatoes per week to producing 200 pounds of potatoes per week. Thus it gains 200 pounds of potatoes per week. The opportunity cost of 1 pound of potatoes per week is 30 pounds of sausage per week divided by 200 pounds of potatoes per week or $3/20^{\text{th}}$ of a pound of sausage per week.
- ii. From the first row to the last row: Ireland goes from producing 150 pounds of sausage per week to producing 0 pounds of sausage per week. Thus it gives up 150 pounds of sausage per week. Ireland goes from producing 0 pounds of potatoes per week to producing 1,000 pounds of potatoes per week. Thus it gains 1,000 pounds of potatoes per week. The opportunity cost of 1 pound of potatoes per week is 150 pounds of sausage per week divided by 1,000 pounds of potatoes per week or $3/20^{\text{th}}$ of a pound of sausage per week. If the Production Possibilities Frontier is linear it does not matter which two rows you choose to compare, the opportunity cost of moving from one to another is the same.

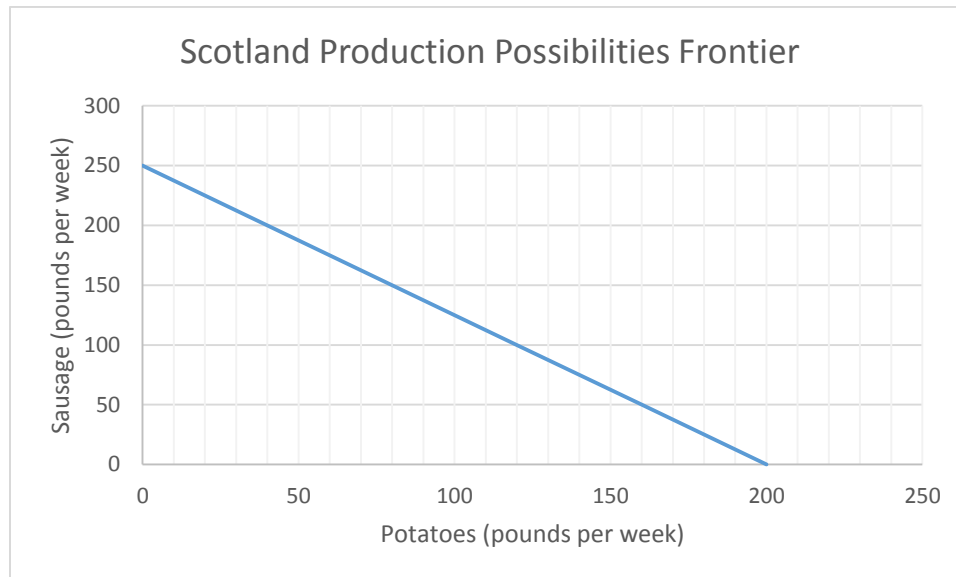
Trade Assessment Questions

- c. Ireland's opportunity cost of producing 1 pound of sausage can be found by dividing the number of pounds of potatoes Ireland gives up by the number of pounds of sausage it gets when moving up between any two rows of Ireland's Production Possibilities Schedule (Table 1):
- i. From the bottom comparing the last two rows: Ireland goes from producing 1000 pounds of potatoes per week to producing 800 pounds of potatoes per week. Thus it gives up 200 pounds of potatoes per week. Ireland goes from producing 0 pounds of sausage per week to producing 30 pounds of sausage per week. Thus it gains 30 pounds of sausage per week. The opportunity cost of 1 pound of sausage per week is 200 pounds of potatoes per week divided by 30 pounds of sausage per week or $6\frac{2}{3}$ of a pound of sausage per week. Note that this is the reciprocal of the answer from part b.
 - ii. From the last row to the first row: Ireland goes from producing 1,000 pounds of potatoes per week to producing 0 pounds of potatoes per week. Thus it gives up 1,000 pounds of potatoes per week. Ireland goes from producing 0 pounds of sausage per week to producing 150 pounds of sausage per week. Thus it gains 150 pounds of sausage per week. The opportunity cost of 1 pound of sausage per week is 1,000 pounds of potatoes per week divided by 150 pounds of sausage per week or $6\frac{2}{3}$ of a pound of potatoes per week.

Trade Assessment Questions

2. Scotland

a. Production Possibilities Frontier:



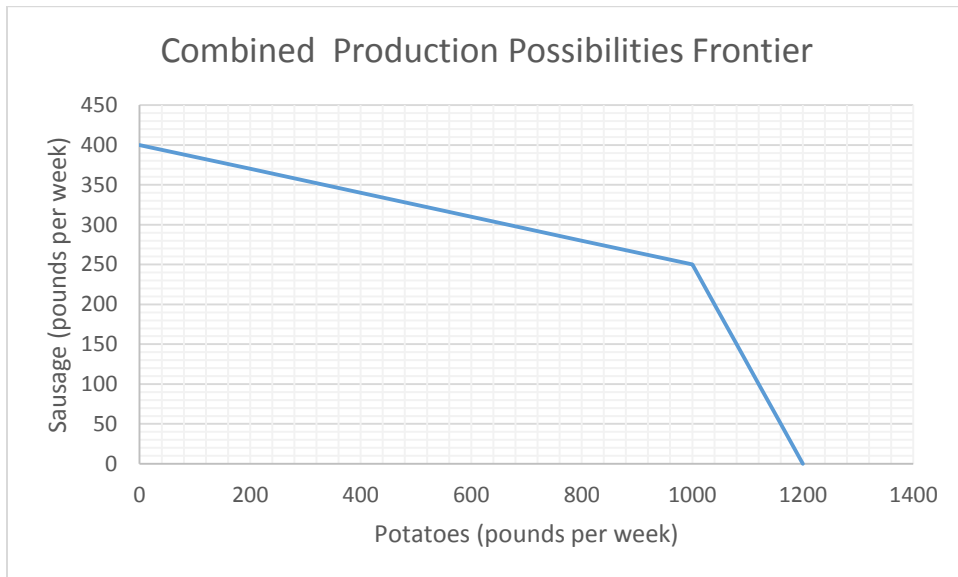
- b. Using the same process as in 1. b. above, the opportunity cost to Scotland of producing one pound of potatoes per week is $1\frac{1}{4}$ pound of sausages.
 - c. Using the same process as in 1. c. above, the opportunity cost to Scotland of producing one pound of sausage per week is $\frac{4}{5}$ of a pound of potatoes.
3. Comparative advantage at producing potatoes: Compare the two countries' opportunity costs shows that Ireland has the comparative advantage at producing potatoes: $\frac{3}{20}$ th of a pound of sausage per week is less than $1\frac{1}{4}$ th of a pound of sausage per week.
4. Comparative advantage at producing sausage: Compare the two countries' opportunity costs shows that Scotland has the comparative advantage at producing sausage: $\frac{4}{5}$ th of a pound of potatoes per week is less than $6\frac{2}{3}$ rd of a pound of potatoes per week.
5. Maximum potatoes: If both countries were to producing only potatoes, together they could produce 1,200 pounds of potatoes per week (1,000 pounds from Ireland and 200 pounds from Scotland). Note: The answers to questions 5, 6 and 7 allow students to start seeing what the "Global" PPF will look like.
6. Maximum Sausage: If both countries were to produce only sausages, together they could produce 400 pounds of sausage per week (150 pounds from Ireland and 250 pounds from Scotland).
7. Specialization: If both countries were to specialize with Ireland producing potatoes and Scotland producing sausage together there would be 1,000 pounds of potatoes and 250 pounds of sausage available per week.

Trade Assessment Questions

8. Combined Production:

Table 3: Combined Production Possibilities Schedule

Combined	
Potatoes	Sausage
0	400
200	370
400	340
600	310
800	280
1000	250
1040	200
1080	150
1120	100
1160	50
1200	0



- Ireland will be the supplier of potatoes. Because it has the comparative advantage in producing potatoes it can offer them for a lower cost (in terms of pounds of sausages) than Scotland could produce them itself.
- Scotland will be the supplier of sausage. Because it has the comparative advantage in producing sausage it can offer it at a lower cost (in terms of pounds of potatoes) than Ireland could produce it itself.

Trade Assessment Questions

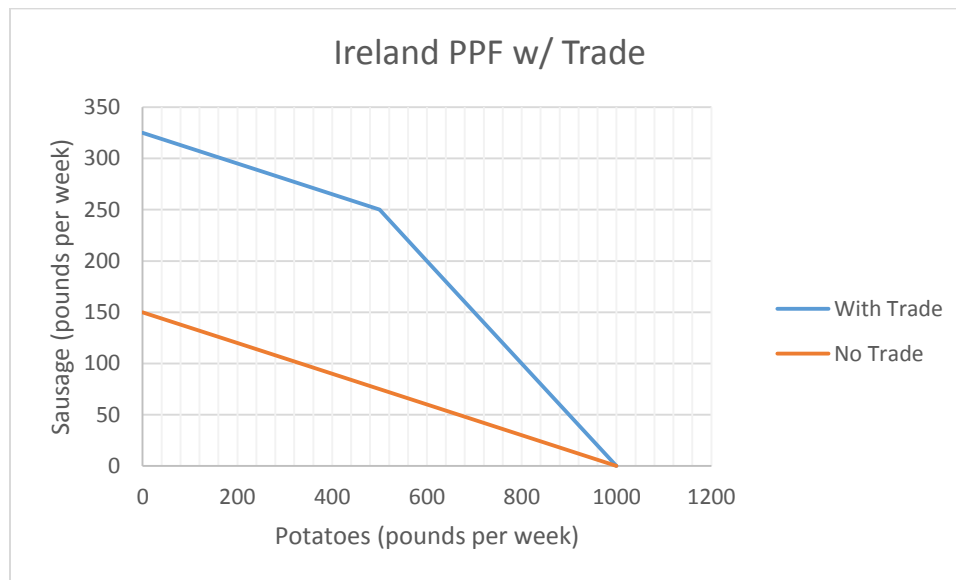
11. Ireland

- a. PPS – the new Production Possibilities Schedule shows that Ireland can acquire up to 250 pounds of sausage per week from Scotland at a price of 2 pounds of potatoes per pound of sausage. Any remaining sausage it will have to produce itself because Scotland can produce no more than 250 pounds of sausage per week.

Table 4: Ireland – Production Possibilities Schedule with trade

Ireland w/ Trade	
Potatoes	Sausage
0	325
250	287.5
500	250
600	200
800	100
1000	0

- b. PPF – the Advantage of trade is shown by comparing the PPF before trade to the PPF after trade.



12. To see that Ireland can consume more with trade than without trade compare the Production Possibilities Frontier before trade to the Production Possibilities Frontier with trade and show all of the combinations of potatoes and sausage that are now available that were not previously available.

Trade Assessment Questions

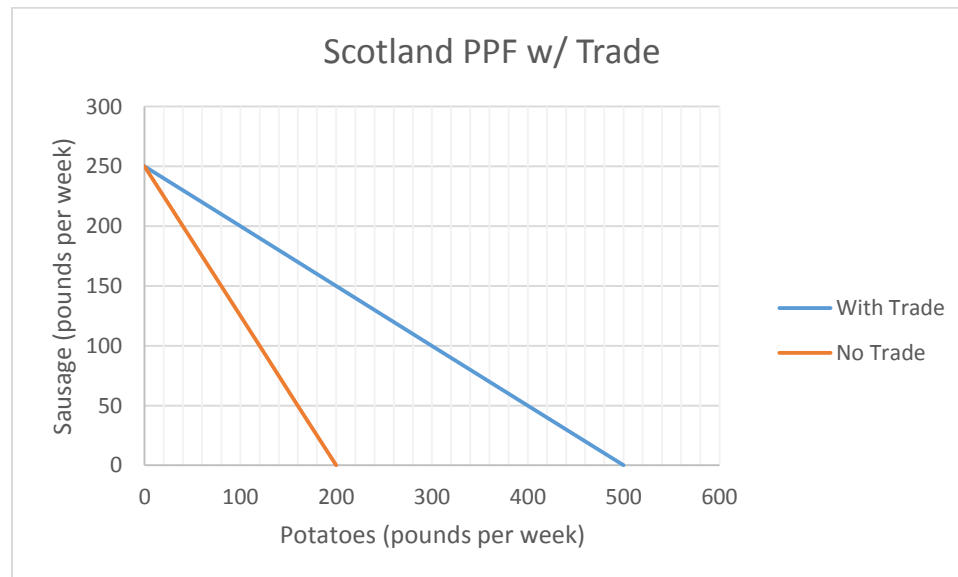
13. Scotland

- a. PPS – the new Production Possibilities Schedule shows that Scotland can acquire up to 500 pounds of sausage per week from Ireland at a price of 2 pounds of potatoes per pound of sausage. If Scotland chooses to buy 500 pounds of potatoes it will exhaust its supply of sausage.

Table 4: Scotland – Production Possibilities Schedule with trade

Scotland w/ Trade	
Potatoes	Sausage
0	250
100	200
200	150
300	100
400	50
500	0

- b. PPF – the Advantage of trade is shown by comparing the PPF before trade to the PPF after trade.



14. To see that Scotland can consume more with trade than without trade compare the Production Possibilities Frontier before trade to the Production Possibilities Frontier with trade and show all of the combinations of potatoes and sausage that are now available that were not previously available.