

# Assignment #1 Question #2

26 points  
total  
~~26~~

## Answer Key

4) A)

Hans	
veggies	goats
0	20
2	18
4	16
10	10
16	4
18	2
20	0

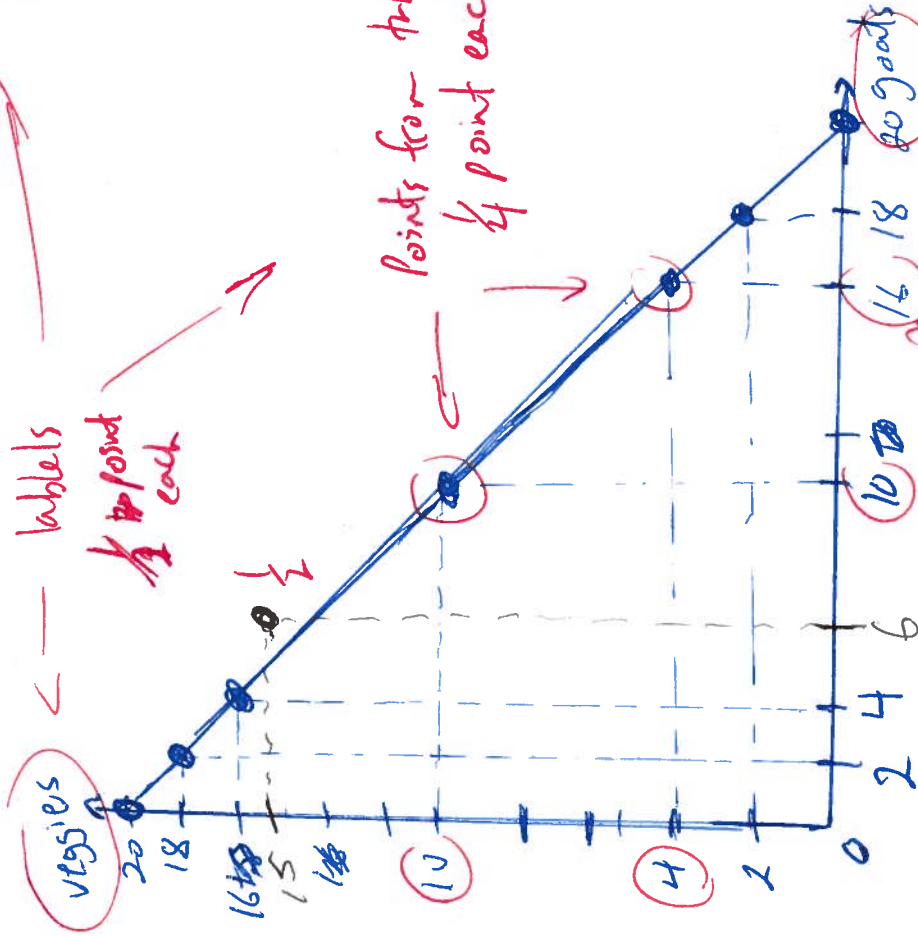
each allocation part is worth  $\frac{1}{2}$  point

Niels	
veggies	goats
0	20
3	18
6	16
15	10
24	4
27	2
30	0

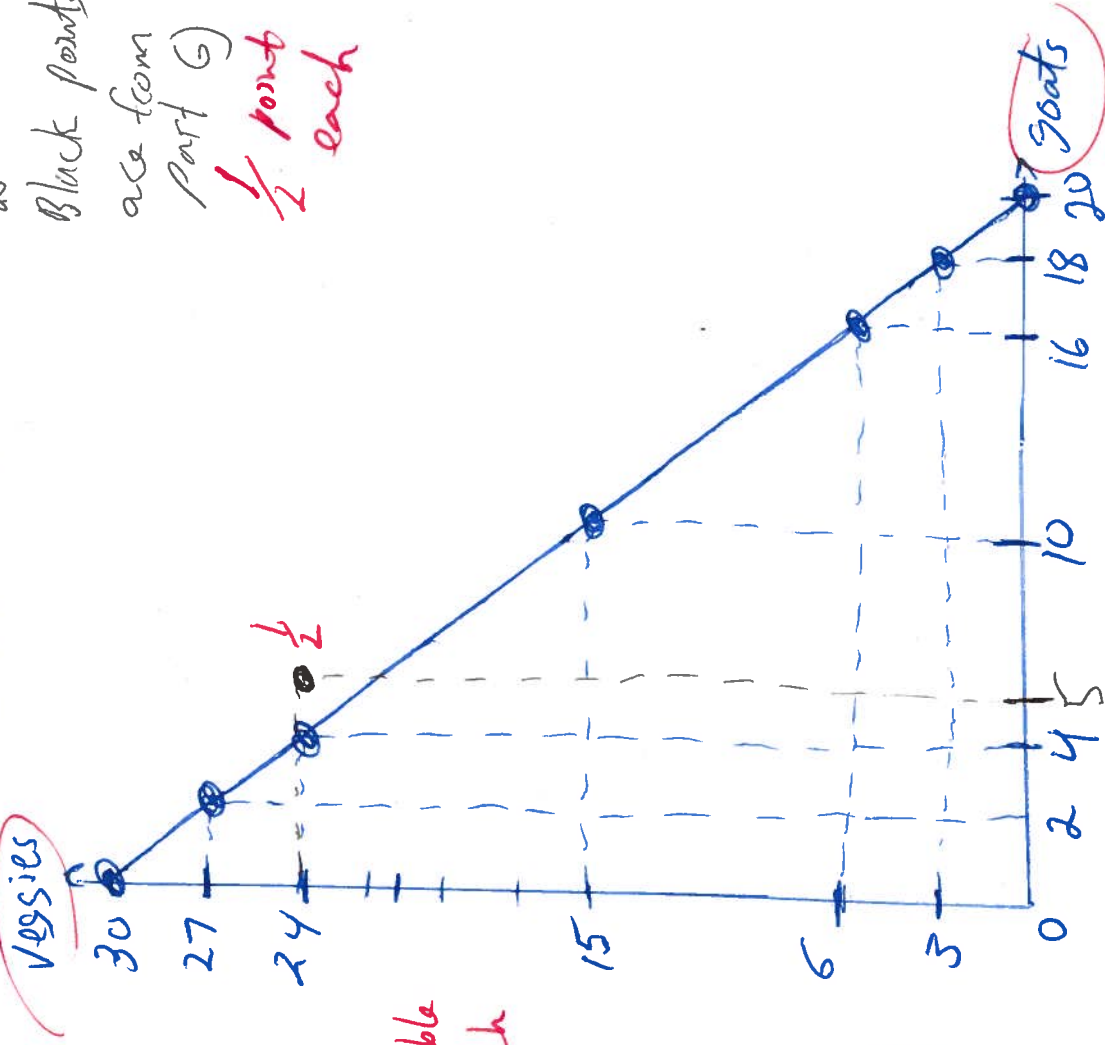
\* I have 7 possible allocations in each table. The question only asked for 4.

B) 4)

Hans' PPF



Ariels' PPF



Points from table  
1/2 point each

Must have  
corresponding numbers

c) 5) Slope =  $\frac{\text{rise}}{\text{run}}$

\* depends how they drew the PPFs in B)

[ Hans' slope =  $\frac{20}{20} = 1$  ] 1 point

[ Niels' slope =  $\frac{30}{20} = 1.5$  \*  $\frac{20}{30} = 0.667$  \* ] 1 point

4) [ The slope of the PPF tells us the opportunity cost of each good. ] 1 point

- 1/2 point each
- Hans' opportunity cost of 1 goat = 1 basket of veggies
  - Hans' opportunity cost of 1 basket of veggies = 1 goat
  - Niels' opportunity cost of 1 goat = 1.5 baskets of veggies
  - Niels' opportunity cost of 1 basket of veggies = 0.667 goats

- 4) D) [ Neither farmer has an absolute advantage in goats, and Niels has an absolute advantage in veggies ] 1 point
- [ Niels has a comparative advantage in veggies, and Hans has a comparative advantage in goats ] 1 point

[ Hans should specialize in goats because his opportunity cost is lower; he only has to give up 1 basket of veggies to get a goat, compared to Niels' 1.5 ] 1 point

[ Niels should specialize in veggies because his opportunity cost is lower; he only has to give up 0.667 goats to get 1 basket of veggies, compared to Hans' 1 ] 1 point

E) Assume specialization: Niels has 30

2) baskets of veggies and Hans has 20 goats. Niels wants to trade veggies for goats and Hans wants to trade goats for ~~to~~ veggies.

1 point  
[ 1 basket of veggies will cost between 0.667 and 1 goats. ]

[ 1 goat is the most Hans is willing to pay for 1 basket of veggies and 0.667 goats is the least Niels will accept for 1 basket of veggies 1 point ]

F) [ 1 point  
1 goat will cost between 1 and 1.5 baskets of veggies ]

2) [ 1.5 baskets of veggies is the most Niels is willing to pay for 1 goat and 1 basket of veggies is the least Hans will accept for 1 goat 1 point ]

- G) Hans started with 20 goats  
Niels started with 30 veggies

3)

After trade

- Hans has 15 goats and 6 baskets of veggies  
1 point
- Niels has 24 baskets of veggies and 5 goats  
1 point

see part B) in Black two points labeled in B) are worth  $\frac{1}{2}$  point each

- H) [These points lie outside of the PPFs of Hans and Niels.] [Hans and Niels are better off with specialization and trade] [because they are able to consume allocation that would be impossible for ~~them~~ them to produce on their own.]
- 2)  $\frac{1}{2}$  point