Quiz 14

1. A group of three friends are sharing a passover meal. Their values for the components of the meal:

	Motzah	Latkes	HB Eggs
A	$1/4$	0	$3/4$
B	$2/3$	$1/3$	0
C	$1/6$	$1/2$	$1/3$

2. Consider the following two cuts

   (a) Give A all the Hard Boiled Eggs and split the Motzah and Latkes evenly (in half) between B and C. What is each players value for <u>their own slice</u>?   (2 pts)

   $A :$ _____ $B :$ _____ $C :$ _____

   (b) Give A all the HB Eggs, give B all the Motzah, and give C all the Latkes. What is each players value for <u>their own slice</u>?   (2 pts)

   $A :$ _____ $B :$ _____ $C :$ _____

3. Is one of cuts (2a) or (2b) objectively better than the other? (1 pt)   <u>Circle One:</u>   Yes   No

4. From your work above, can you conclude that cut (2a) is pareto-optimal? (1 pt)

   <u>Circle One:</u>   Yes   No

5. From your work above, can you conclude that cut (2b) is pareto-optimal? (1 pt)

   <u>Circle One:</u>   Yes   No

6. Circle T if the claim is true, F if the claim is false. (1 pt each)

   (a)   Every equitable division is fair.   T   F

   (b)   For the example above, the equal division is pareto-optimal.   T   F

   (c)   Every pareto-optimal division is envy-free.   T   F