Quiz 12 Solutions

1. The freshman softballers A, B, and C are bidding for the most honorable and desirable equipment duty - oiling coach's glove. The bids, in sticks of gum, are

$$\boxed{a = 23 \qquad b = 21 \qquad c = 15}$$

Suppose B is the winning bidder and the payouts are

$$x_A = 8 \qquad x_C = 6$$

(a) Construct the envy table for this example. Show work for what players think the winning bidder gets. REMEMBER: the left column is __ thinks and the top row is __ gets. (4 pts)

	A	B	C
A	8	9	6
B	8	7	6
C	8	1	6

Everyone knows A and C got paychecks with values $x_A = 8$ sticks of gum and $x_B = 6$ sticks of gum. The ambiguity is what they think B got.

$$AtBg = a - x_A - x_C = 23 - 8 - 6 = 9$$
$$BtBg = b - x_A - x_C = 21 - 14 = 7$$
$$CtBg = c - x_a - x_b = 15 - 14 = 1$$

(b) Does C envy A in this compensation arrangement? (1 pt) Circle One: **Yes** No

(c) Does A envy B in this compensation arrangement? (1 pt) Circle One: **Yes** No

(d) Does B envy C in this compensation arrangement? (1 pt) Circle One: Yes **No**

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

(a) If a compensation arrangement is unfair, there will be envy. **T** F

(b) If the winning bidder is a highest bidder, the equitable compensation arrangement is always envy-free. T **F**

(c) Every envy-free compensation arrangement is pareto-optimal. **T** F