Intro to Contemporary Math

Knaster's Method Part 2, XB Ratios

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Agenda

- Knaster's Method: Surplus and Compensation
- Return on Bids and XB ratios
- Envy and Perception

Announcements

- Form your project groups by this Thursday.
- Homework due next Monday.

Return on Bids: XB Ratio

- A person's **XB ratio** is the fraction of their Compensation over their total bid:

$$\frac{x_{Person}}{b_{Person}}$$

The higher, the better: the person got more in return for what they bid.

?(3.1) Finding XB Ratio

- $b_{Alice} = 300$
- $b_{Bob} = 340$
- $x_{Alice} = 170$
- $x_{Bob} = 190$

Compute Alice's XB ratio and Bob's XB ratio. Round your answer to three decimal digits. Type and send two letters.

1) Alice's XB ratio:
2) Bob's XB ratio:

A) 0.882
B) 0.895
C) 1.765
D) 1.789
E) 0.567
F) 0.559

Finding XB Ratio Answers

- Alice's XB ratio is

$$\frac{x_{Alice}}{b_{Alice}} = \frac{170}{300} = 0.567$$

- Bob's XB ratio is

$$\frac{x_{Bob}}{b_{Bob}} = \frac{190}{340} = 0.559$$

Alice has the better (higher) XB ratio. She got more in return for what she bid.

Next time

- Envy and Points of View
- Adjusted Winner Method