

MA111: Contemporary mathematics

Entrance Slip (due 5 min past the hour):

Blair and Devin see an ad for this apartment for \$700/mo. Blair is willing to pay \$425 per month for the master bedroom or \$300/mo for the other bedroom. Devin is willing to pay \$350/mo for the master bedroom, or \$325/mo for the other bedroom.

Is it reasonable to rent this place? Explain how or why not:

Who should get which room?

How much should each pay per month?

Schedule:

- HW Comp1-Rooms is due by 11:50pm on Thu Oct 29th, 2015
- Mini-exam 3 is in class, Thu Nov 5th, 2015
- Exam 3 is in class, Thu Nov 19th, 2015

Today we look at the trouble with splitting the bill



While we are passing out the worksheet...

- Please turn in your entrance slips. We will do this every non-exam day.
Please bring your own 3x5 index cards.
- Someone explain why they shouldn't rent this place.
- Someone explain why they should.
- Someone who thinks they should rent...
who pays how much for what?

Important concepts

- The **value** depends on who is asked
- Splitting the bill might not be even if people get different values from it
- The **surplus** is the amount of money leftover after everyone pays the most they are willing for what they get
- That there **is** a surplus is pretty amazing