

Blair, Casey, and Devin are throwing a for-profit party and splitting the money at the end evenly. They all agree live music is probably a good idea, but disagree on how much to pay for it. Since they are splitting the profits evenly, they are only willing to pay a third (each) of what they think the band will bring in.

Which band should they book and how should they split the bill?

Here are their guesses on how much each band would bring in, along with the band's cost:

	Ford Theater Reunion	SHOZO	Big Maracas	No Band
Blair	\$3000	\$2400	\$2400	\$0
Casey	\$3300	\$3000	\$3300	\$0
Devin	\$2700	\$3000	\$3300	\$0
Band	\$3000	\$2700	\$2700	\$0

The band will only be happy if it is paid in full. Blair, Casey, and Devin will only be happy if they pay less than a third of what they think the band will bring in. Can we make everyone happy according to those requirements?

What is wrong with the following solutions?

- (a) They hire FTR. Blair pays \$800, Casey pays \$800, Devin pays \$800.

FTR refuses to play for $800 + 800 + 800 = \$2400$.
Rist ensues.
B, C, D get sued
by venue

- (b) They hire FTR. Blair pays \$1000, Casey pays \$1000, Devin pays \$1000.

Devin flakes and refuses to pay. Devin only expected to get $\$2700/3 = \900
and wasn't willing to pay \$1000 to earn \$900 (aka lose \$100)

- (c) They hire SHOZO. Blair pays \$900, Casey pays \$900, Devin pays \$900.

Blair flakes. $900 > \frac{2400}{3} = 800$

- (d) They hire BigM. Blair pays \$900, Casey pays \$900, Devin pays \$900.

Blair flakes $900 > \frac{2400}{3} = 800$

- (e) They hire BigM. Blair pays \$700, Casey pays \$1000, Devin pays \$1000.

Nothing? Blair: $700 < \frac{2400}{3} = 800$, \$100 profit ☺
C: $1000 < \frac{3300}{3} = 1100$, \$100 profit ☺
D: $1000 < \frac{3300}{3} = 1100$, \$100 profit ☺
700
1000
+1000
2700
BigM
is paid ☺

- (f) They hire BigM. Blair pays \$720, Casey pays \$990, Devin pays \$990.

Nothing? B: \$80 profit 11% of investment
C: \$110 profit 11% of investment
D: \$110 profit 11% of investment
720
990
990
2700
BigM
is paid ☺

How much profit does each person expect to make?

(answered ↑)

Trivia: Standard Netflix is \$8 per month for standard def on a single screen. Netflix also has a \$9 per month plan that gives two screens and HD.

Olive has standard netflix, but her BFF roommate Uma doesn't have netflix. Olive offers to add Uma to her plan, if Uma will pay \$5 per month.

How much would Uma have to pay regularly to get Netflix? How much is she saving? And she is getting HD??

\$8, so saving \$3/mo and getting HD!

How much would Olive be paying if Uma accepts? How much is she saving? And she is getting HD??

$\$9 - \$5 = \$4$, so saving $\$8 - \$4 = \$4$ /mo and getting HD!

★ Is there anything wrong with this deal?

No? Both are saving money and getting HD!

Yes? Uma didn't want netflix, but is paying more than Olive who did want it!

Edna and Ivy are also BFF roommates. Edna has standard Netflix. Ivy has been talking to Uma and has a great idea. Ivy tells Edna that Edna can upgrade to HD and save two dollars a month! All Edna needs to do is switch to the \$9 a month plan and Ivy will pay her \$3 per month.

Will Edna really save \$2 per month? And she is getting HD??

Yes and Yes!! $\$9 - \$3 = \$6$, $\$8 - \$6 = \$2$ saved per month, plus HD

How much would Ivy normally have to pay for netflix? And she is getting HD??

\$8, so saving $\$8 - \$3 = \$5$ per month, and HD!

★ Is there anything wrong with this deal?

No? Both are saving money and getting HD!

Yes? Edna is paying twice as much as Uma, but it's Edna's name on the bill. If she takes the risk/responsibility she should get the best reward!

★ All these answers are from people I surveyed.