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.
- (b) They hire FTR. Blair pays \$1000, Casey pays \$1000, Devin pays \$1000.
- (c) They hire SHOZO. Blair pays \$900, Casey pays \$900, Devin pays \$900.
- (d) They hire BigM. Blair pays \$900, Casey pays \$900, Devin pays \$900.
- (e) They hire BigM. Blair pays \$700, Casey pays \$1000, Devin pays \$1000.
- (f) They hire BigM. Blair pays \$720, Casey pays \$990, Devin pays \$990.

How much profit does each person expect to make?