

## 7. Aah! Me hearties

For this question we use English proof and retroduction.

① if there are two people left, D and E. then whatever

D proposes, she'll be thrown overboard even if she gives all gold coins to E, because E is blood-thirsty.

② in order to avoid death, D will try to let C be alive, and agree with C whatever she proposes, so C will take all gold coins and gives nothing to D and E, D has to agree to keep C and herself alive

③ if B wants to live, she'll try to get support from D and E, because C wants her dead and get all coins. All B needs to do is to give D and E each one coin, so they'll get one instead of none, they'll support her and B get all others

④ if A wants to live, she'll get at least 2 supports. She'll give

C one coin to get her support because if C doesn't, she'll

get nothing in B's plan. Another support is from either

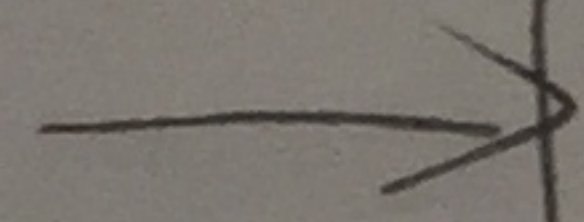
D or E who'll get 2 coins instead of one, but another

one will get nothing because A has enough support to keep alive.

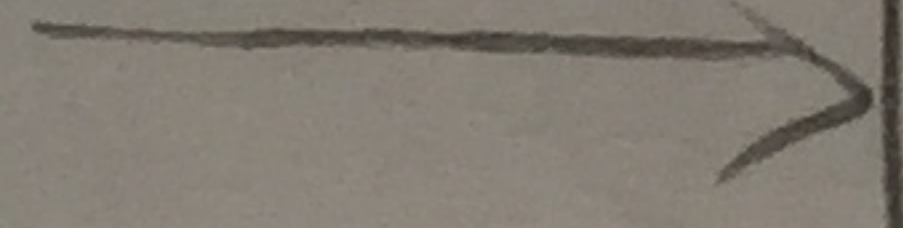
As a result, nobody'll die. Ann gets 97 coins, Brenda gets nothing, Carla gets one coin, Danielle gets two and Emily gets none, or Danielle gets none and Emily gets none

	A	B	C	D	E
①	97	0	1	2	0
or ②	97	0	1	0	2

C	D	E
100	0	0



B	C	D	E
98	0	1	1



A	B	C	D	E
97	0	1	2	0
97	0	1	0	2