Homework 9

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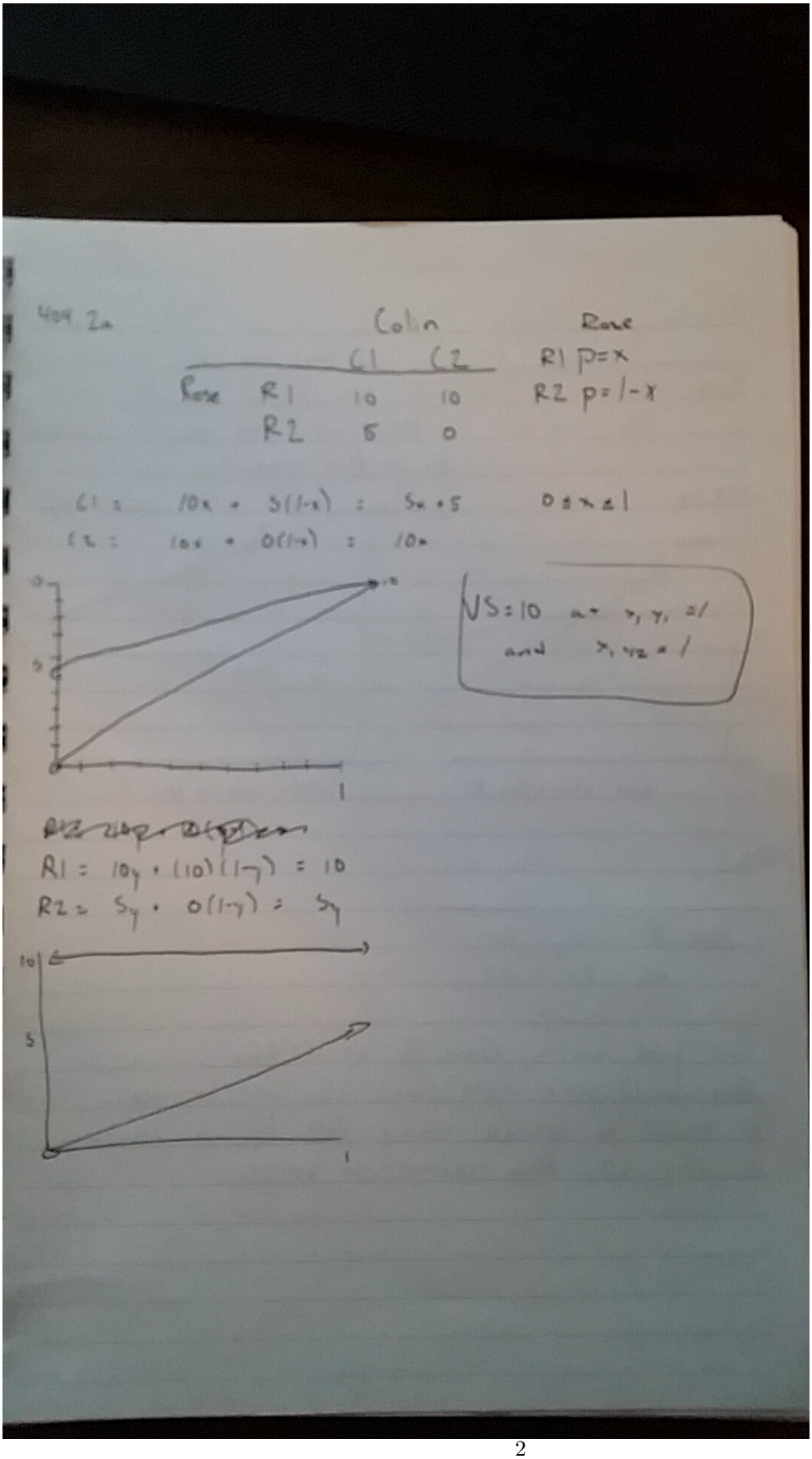
385.1a

In either case, the row player ends with ev = 10.

385.1c

In this case the pitcher should throw a knuckle ball, and the batter should guess knuckleball. A fastball is detrimental to the pitcher's gains.

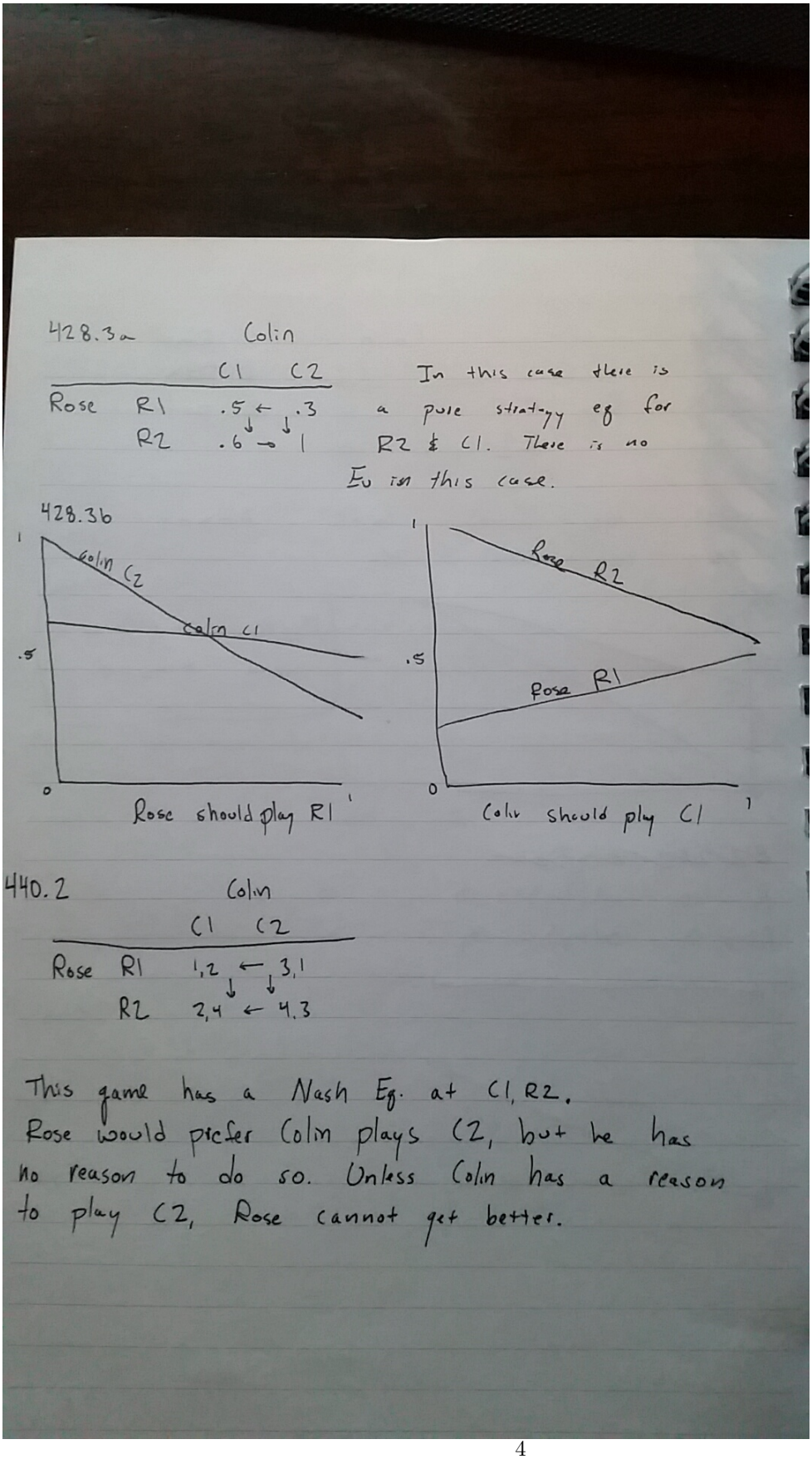
404.2a


404.2a
Colin
C1 C2
Rose R1 10 10
R2 5 0
Rose
R1 p=x
R2 p=1-x
C1 : 10x + 5(1-x) : 5x + 5 0≤x≤1
C2 : 10x + 0(1-x) : 10x
10
5
1
VS: 10 at x, y, = 1
and x, y2 = 1
R1 : 10y + (10)(1-y) = 10
R2 : 5y + 0(1-y) : 5y
10
5
1

420.1

The strategy is that Colin will play C2 and Rose will play R1. If this occurs then Rose will have 10 in either case, and Colin's choice becomes irrelevant. Since both outcomes are 10, there isn't a min-max.

428.3 and 440.2



428.3a

		Colin C1	Colin C2
Rose	R1	.5 ←	.3
	R2	.6 →	1

In this case there is a pure strategy eq for R2 & C1. There is no Eu in this case.

428.3b

Rose should play R1

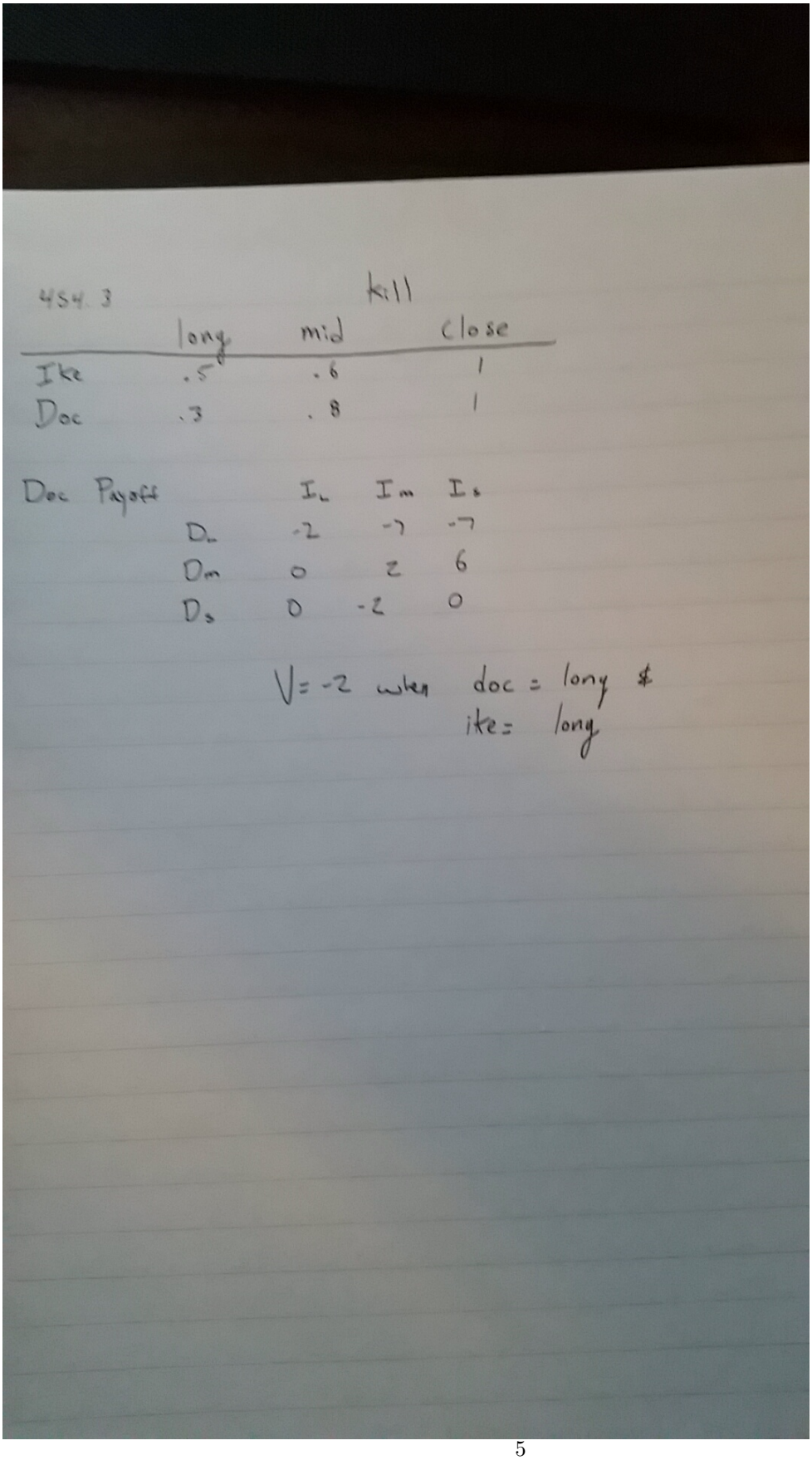
Colin should play C1

440.2

		Colin C1	Colin C2
Rose	R1	1,2 ←	3,1
	R2	2,4 ←	4,3

This game has a Nash Eq. at C1, R2. Rose would prefer Colin plays C2, but he has no reason to do so. Unless Colin has a reason to play C2, Rose cannot get better.

454.3


454.3
kill
long
mid
close
Ike .5 .6 1
Doc .3 .8 1
Doc Payoff
I_L I_m I_s
D_L -2 -7 -7
D_m 0 2 6
D_s 0 -2 0
V = -2 when doc = long & ike = long