HW 4.3

Saturday, September 5, 2020 1:18 PM

Passed Solution review

Worked w/ Hayl

	T	O
QA	2,2	2,2
QB	2,2	2,2
IA	4,2	1,3
IB	3,4	1,3

a) $U_1(\sigma_3, I)$ For $\sigma_1 = (1/4, 1/4, 1/4, 1/4)$

$1/4(2+2+4+3) = 1/2 + 1/2 + 1 + 3/4 = 11/4$ or 2.75

b) $U_2(\sigma_1, Q)$ For $\sigma_1 = (1/8, 1/4, 1/4, 3/8) = (1/8, 2/8, 2/8, 3/8)$

$2/8 + 4/8 + 6/8 + 9/8 = 21/8$

c) $U_1(\sigma_1, \sigma_2)$ For $\sigma_1 = (1/4, 1/4, 1/4, 1/4)$, $\sigma_2 = (1/3, 2/3)$

	I	O
QA	1/12	2/12
QB	1/12	2/12
IA	1/12	2/12
IB	1/12	2/12

$2/12 + 4/12 + 4/12 + 3/12 + 4/12 + 4/12 + 2/12 + 2/12 = 23/12$

d) $U_1(\sigma_1, \sigma_2)$ For $\sigma_1 = (0, 1/3, 1/6, 1/2)$, $\sigma_2 = (2/3, 1/3)$

	I	O
QA	0	0
QB	4/18	2/18
IA	2/18	1/18
IB	6/18	3/18

$0 + 8/18 + 8/18 + 18/18 + 0 + 4/18 + 1/18 + 3/18 = 42/18 = 7/3$