

(a)

+

		$C_x = 1.5C_\sigma$	
		E	B
I	E	0.6, 0.6	-0.1, 2.1
	B	2.1, -2.1	2.1, -0.6

O

		$C_x = 2C_\sigma$	
		E	B
I	E	0.8, 0.8	0.2, 1.8
	B	1.8, -1.8	1.8, -0.8

X

		$C_x = 3C_\sigma$	
		E	B
I	E	1, 1	0.4, 1.4
	B	1.4, -1.4	1.4, -1

(b)

+

III

		$C_x = 1.5C_\sigma$	
		E	B
III	E	1, 1	-0.2, 1.8
	B	1.2, -0.8	0, 0

		$C_x = 2C_\sigma$	
		E	B
III	E	1, 1	0.2, 1.2
	B	0.8, -0.2	0, 0

		$C_x = 3C_\sigma$	
		E	B
III	E	1, 1	0.4, 0.9
	B	0.6, 0.1	0, 0

(c)

$$P(\text{East}) = 0.2$$

$$P(\text{West}) = 0.6$$

IV

		$P(\text{East}) = 0.2$	
		E	B
IV	E	0.8, 0.8	-1.2, 1.2
	B	1.9, 0.1	-0.1, 0.6

		$P(\text{East}) = 0.4$	
		E	B
IV	E	1, 1	-1.4, 1.8
	B	3, -1.4	0.6, -0.6

		$P(\text{East}) = 0.6$	
		E	B
IV	E	1, 1	-0.2, 1.8
	B	3, -2.6	1.8, -1.8