

1. BA 10, 10, CC 5, 6

2. 1: $Eu A = 6q + 5(1-q) = q + 5$
 $Eu B = 3q + 6(1-q) = -3q + 6$
 $q + 5 = -3q + 6$
 $4q = 1$
 $q = \frac{1}{4}$

2: $Eu A = 4p + 8(1-p) = -4p + 8$
 $Eu B = 7p + 6(1-p) = p + 6$
 $-4p + 8 = p + 6$
 $2 = 5p$
 $p = \frac{2}{5}$

3. a)

		2	
		A	B
1	A	0.4, 1	0.4, 0
	B	1, 0	0, 1

b) 1: $Eu A = q(0.4) + (1-q)(0.4) = 0.4$
 $Eu B = q(1) + (1-q)(0) = q$
 $q = 0.4$

c) $Eu(\text{Player 1}) = 0.2(0.4) + 0.3(0.4) +$
 $0.2(1) + 0.3(0) = 0.4$

2: $Eu A = p$
 $Eu B = 1-p$
 $p = 1-p$
 $p = 0.5$

$Eu(\text{Player 2}) = 0.2(1) + 0.3(0) +$
 $0.2(0) + 0.3(1) = 0.5$