

$$\textcircled{2} \textcircled{a} E_1(\{B, C\}) = p[g \cdot 0 + (1-g)1] + (1-p)[g3 + 0(1-g)] \\ = g(3-4p) + p$$

where belief system is $\mu_1(B)=p$ & $\mu_1(C)=1-p$.

where : If $p < \frac{3}{4}$ then choose $g=1$
 If $p > \frac{3}{4}$ " " $g=0$
 If $p = \frac{3}{4}$ then any g .

$$E_2(A) = p[g \cdot 4 + (1-g) \cdot 0] + (1-p)[g \cdot 0 + (1-g)1] \\ = 1-g + p(5g-1)$$

If $g < \frac{1}{5}$ then $p=0$

If $g > \frac{1}{5}$ then $p=1$

If $g = \frac{1}{5}$ then p arbitrary.

Only compatible choices are $p = \frac{3}{4}$ & $g = \frac{1}{5}$.

Belief $\mu_1(B) = \frac{3}{4}$ $\mu_1(C) = \frac{1}{4}$.

Payoff are $E_1 = \frac{1}{5}(3 - 4 \cdot \frac{3}{4}) + \frac{3}{4} = \frac{3}{4}$; $E_2 = 1 - \frac{1}{5} + \frac{3}{4}(5 \cdot \frac{1}{5} - 1) = \frac{4}{5}$.

⑥ Choice at K is KL payoff $(0, 1)$

⑦ At R A payoff $(\frac{3}{4}, \frac{4}{5})$
 K " $(0, 1)$.

P_1 is choosing so chooses A , $\frac{3}{4} > 0$.

Strategy for P_1 $\pi_1(RA) = 1$, $\pi_1(RK) = 0$
 $\pi_1(BF, CH) = \frac{1}{5}$ $\pi_1(BG, CJ) = \frac{4}{5}$

Strategy for P_2 $\pi_2(KL) = 1$ $\pi_2(KM) = 0$
 $\pi_2(AB) = \frac{3}{4}$, $\pi_2(AC) = \frac{1}{4}$.

Beliefs $\mu_1(B) = \frac{3}{4}$ $\mu_1(C) = \frac{1}{4}$.