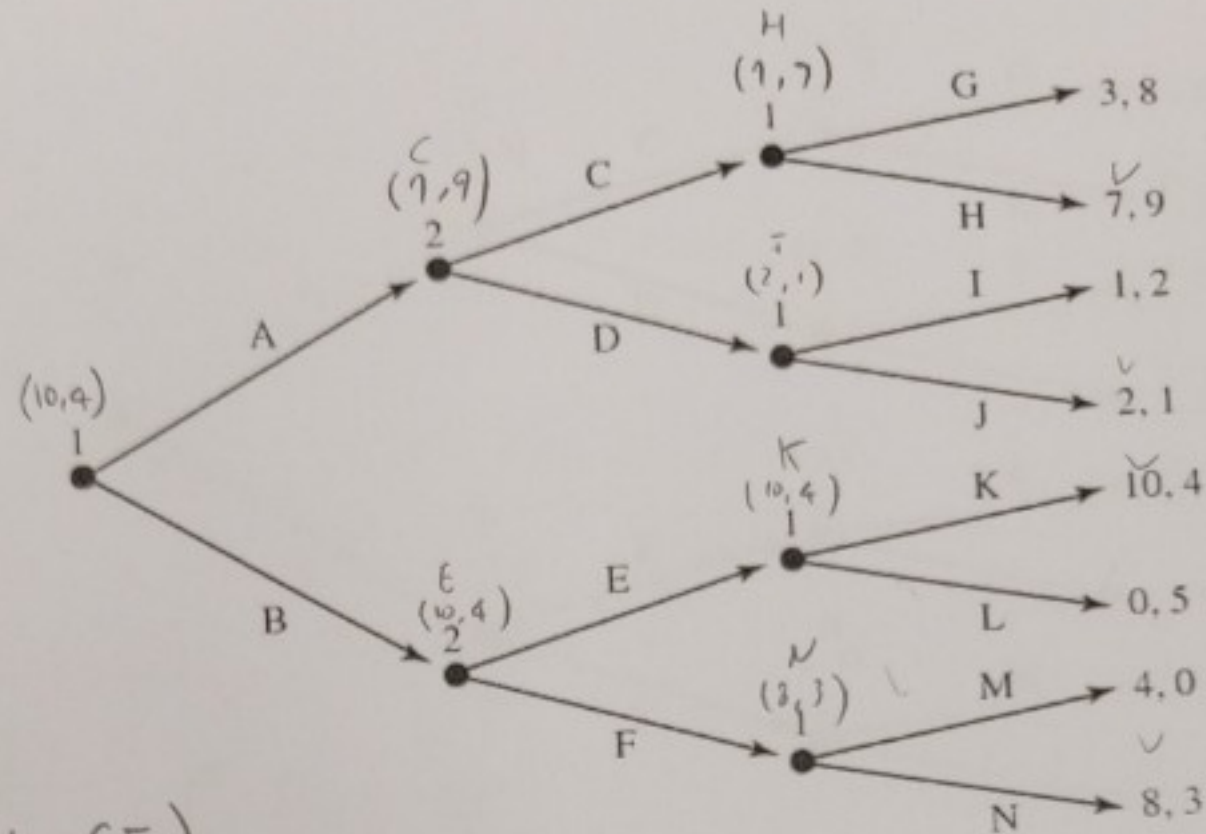


9. Consider the extensive form game. By using backward induction, find an equilibrium. (6 points)



(BKN, CE)

수신유도 과정은 추가로 첨부한 두 A4용지 PDF 파일에 있습니다

10. Consider a Cournot duopoly operating in a market with inverse demand $P(Q) = a - Q$, where $Q = q_1 + q_2$ is the aggregate quantity on the market. Both firms have total costs $c_i(q_i) = c \cdot q_i$, but demand is uncertain: it is high ($a = a_H$) with probability θ and low ($a = a_L$) with probability $1 - \theta$. Furthermore, information is asymmetric: firm 1 knows whether demand is high or low, but firm 2 does not. All of this is common knowledge. The two firms simultaneously choose quantities.

(a) What are the best responses for the two firms, respectively? (8 points)

from the calculation

$$q_1^*(a_H) = \frac{a_H - q_2^* - c}{2}$$

$$q_1^*(a_L) = \frac{a_L - q_2^* - c}{2}$$

$$q_2^* = \frac{\theta(a_H - q_1^*(a_H)) + (1 - \theta)(a_L - q_1^*(a_L)) - c}{2}$$

these are best response
to both firms