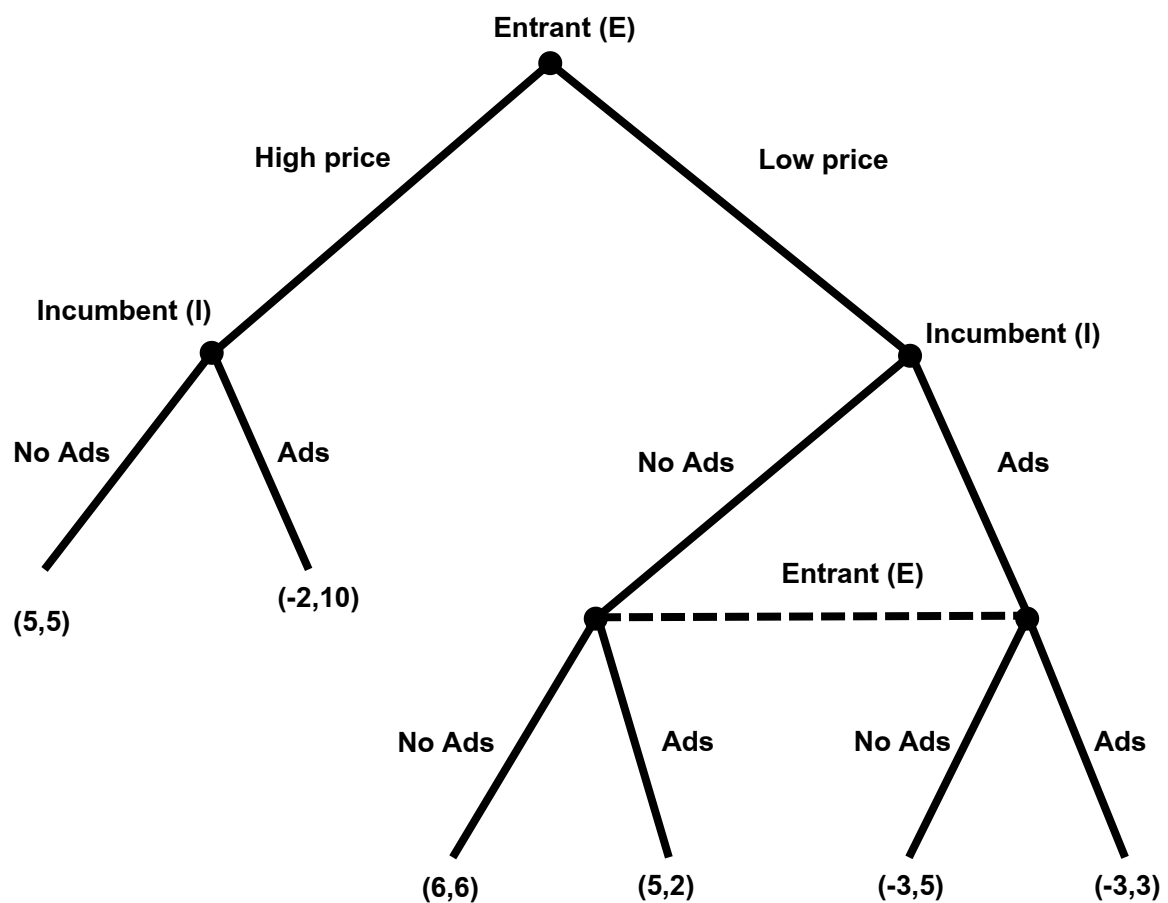


1. "A dominant firm with market power can set the market price. However, the competitive fringe reduces the market power of the dominant firm. Therefore, to maintain the market power, the dominant firm should eliminate the competitive fringe and become a monopolist by setting low price." Discuss.
2. Consider a game tree below, an entrant is deciding whether to set low price or not. If the low price is chosen, it then has to choose whether to advertise or not. An incumbent, after observing entrant's pricing strategy, chooses if it also needs to advertise or not.



Answer the following questions

2.1 Identify all possible strategies available to both players

2.2 Construct a normal form game and find Nash equilibrium

2.3 How many subgames are there? Find Subgame Perfect Nash Equilibrium (SPNE) of this game. Compare SPNE with Nash equilibrium

3. Consider the following game,

		Firm 2	
		Cooperate	Defect
Firm 1	Cooperate	40,40	20,55
	Defect	55,20	30,30

3.1 What is the Nash equilibrium of this game?

Consider the game is repeated infinitely

3.2 If both firms decide to cooperate and use the “Grim strategy” (that is, keep cooperating until your opponent defects, then play Nash equilibrium strategy forever). Calculate the minimum value of discount factor (δ) required for the firm to keep cooperating.

3.3 If it takes 1 period before defection can be detected, calculate the minimum value of discount factor required for cooperation. Compare the answer with your answer in 3.2 and briefly discuss the results.