Please answer all questions

1. Time Magazine and Newsweek are two competing news magazines. Suppose that each

company charges the same $5.00 price for their magazines. Each wants to maximize its sales

given the $5.00 price. Each week, there are two potential cover stories. One is in politics. The

other is on the economy. Sales of both companies are affected by the decisions on which

story to place on their covers. The resulting sales for the two companies are given in the

following table:

|  |  |  |  |
| --- | --- | --- | --- |
| Time Cover | Newsweek Cover | Time Sales  ($000’s) | Newsweek Sales  ($000’s) |
| Politics | Politics | 400 | 150 |
| Politics | Economy | 700 | 200 |
| Economy | Economy | 200 | 150 |
| Economy | Politics | 300 | 700 |

Assume the two companies make their decisions simultaneously

a. Construct a payoff table (by completing the table below) to show the sales (in dollars)

each company would earn in each of the four decision situations.

|  |  |  |  |
| --- | --- | --- | --- |
| Time Magazine |  | Newsweek Magazine | |
|  | Politics | Economy |
| Politics | A | B |
| Economy | C | D |

b. Does Time Magazine have a dominant strategy? If so, what is it? Why?

c. Does Newsweek Magazine have a dominant strategy? Why? If so, what is it? Why?

d. What is the *Nash equilibrium* in this game? Explain why?

2. Suppose the Newsweek Magazine chooses and announces its cover story before Time

Magazine chooses its cover. Construct a diagram (game tree) that shows the structure and

payoffs of the game and answer the following questions (showing the diagram here is

optional).

a. What is the Nash equilibrium in this game? Explain how you arrived at your answer.

b Is there a first- mover advantage or first-mover disadvantage in this game? Explain why?