

Homework 5

Questions 1,2,3,4: Read the text on the Blotto game, on page *II* – 26 of Ferguson. Problems 13 (both parts), Problem 14(a) and Problem 15.

Question 4: Player *II* is moving an important item in one of three cars, labelled 1,2 and 3. Player *I* will drop a bomb on one of the cars of his choosing. He has no chance of destroying the item if he bombs the wrong car. If he chooses the right car, then his probability of destroying the item depends on that car. The probabilities for cars 1,2 and 3 are equal to $3/4$, $1/4$ and $1/2$.

Write the 3×3 payoff matrix for the game, and find some optimal winning strategies for each of the players.