1. Solve the following LPP by graphical method

Max 

subject to



1. Solve the following LPP by Simplex method

Max 

subject to



1. Solve the following LPP by Simplex method

Min 

subject to



1. Solve the following LPP by Simplex method

Max 

subject to



1. Solve the following transportation problem



1. A sales manager has to assign salesman to four territories. He has four candidates of varying experience and capabilities, and asses the possible profit for each salesman in each territory as given below. Find the assignment that maximizes the profit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Salesman | Territories | | | |
| A | B | C | D |
| 1 | 35 | 27 | 28 | 37 |
| 2 | 28 | 34 | 29 | 40 |
| 3 | 35 | 24 | 32 | 33 |
| 4 | 24 | 32 | 25 | 28 |

1. Solve the following zero-sum game:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Player A |  | Player B  B1 B2 B3 B4 | | | |  |
| A1 | 5 | - 10 | 9 | 0 |  |
| A2 | 6 | 7 | 15 | 1 |  |
| A3 | 8 | 7 | 2 | 3 |  |
| A4 | 3 | 4 | - 1 | 4 |  |
|  |  |  |  |  |  |  |

1. Given the following 2 x 4 game (The payoff is for the player A). solve this problem graphically

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Player A |  | Player B | | | | | |
| B1 | | B2 | B3 | | B4 |
| A1 | 2 | 2 | | | 3 | - 1 |
| A2 | 4 | 3 | | | 2 | 6 |