Consider a cost-benefit-trade-off problem having the following data:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Benefit Contribution | |  |
|  | Per Unit of | |  |
|  | Each Activity | |  |
|  |  |  | Minimum |
|  |  |  | Acceptable |
| Benefit | 1 | 2 | Level |
| 1 | 5 | 3 | 60 |
| 2 | 2 | 2 | 30 |
| 3 | 7 | 9 | 126 |
| Unit Cost | $60 | $50 |  |

1. Formulate a linear programming model for this problem on a spreadsheet.
2. Use Solver to find the optimal solution.
3. Express the model in algebraic form.
4. Use the graphical method to solve the problem.