Knapsack

TOTAL POINTS 2

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1. In the TV commercial placement problem, your goal is to select a set of TV commercials (each commercial has duration and revenue) so that the total revenue is maximum while the total duration does not exceed the length of the available time slot.

   1 / 1 point

   To state this problem as a knapsack problem, you set

   - ◉ item value to be equal to TV commercial revenue and item weight to be equal to TV commercial duration.
   - ○ item value to be equal to TV commercial duration and item weight to be equal to TV commercial revenue.

   ✓ **Correct**
   In this problem, we are maximizing revenue (value) while keeping the total duration (weight) limited.

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2. In optimizing data center performance problem your goal is to purchase computers for a data center to achieve the maximal performance under limited budget.

   1 / 1 point

   To state this problem as a knapsack problem, you set

   - ○ item value to be equal to computer cost and item weight to be equal to computer performance.
   - ◉ item value to be equal to computer performance and item weight to be equal to computer cost.

   ✓ **Correct**
   In this problem, we are maximizing performance (value) while keeping the budget (weight) limited.