

Sang Hwa Lee

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LAB 6

Briefly describe two other situations where one could use an optimization mode.

1. One situation could be when a bus company is organizing routes and bus stops in a city. The bus company would need to organize the most efficient routes and stops that require the least amount of gas but offer opportunities to gain more customers in optimal areas.

Objective

- The objective would be to maximize profit for the bus company.

Decision Variable

- Decision variables may include gas prices, most population dense areas, and the distance between these bus stop areas.

2. Another situation could be when a family tries to decide how to move homes. This scenario would include choosing the best method of transporting and moving to a new home.

Objective

The objective would be to minimize costs when moving.

Decision Variable

Decision variables would include the cost of shipping, the cost of movers, the cost of a moving truck, and the cost of using a personal vehicle. Another variable could be the time spent for each of these moving methods.