## Lagrange multipliers

1. In an open-top wooden drawer, the two sides and back cost $\$ 2 / \mathrm{sq}$. ft., the bottom $\$ 1 /$ sq. ft. and the front $\$ 4 /$ sq. ft. Using Lagrange multipliers find the dimensions of the drawer with the largest capacity that can be made for $\$ 72$.

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### 18.02SC Multivariable Calculus

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