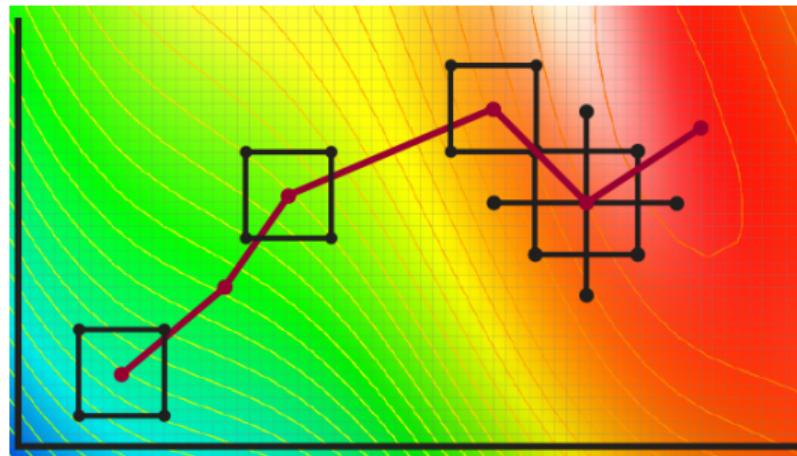


Experimentation for Improvement



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Design and Analysis of Experiments

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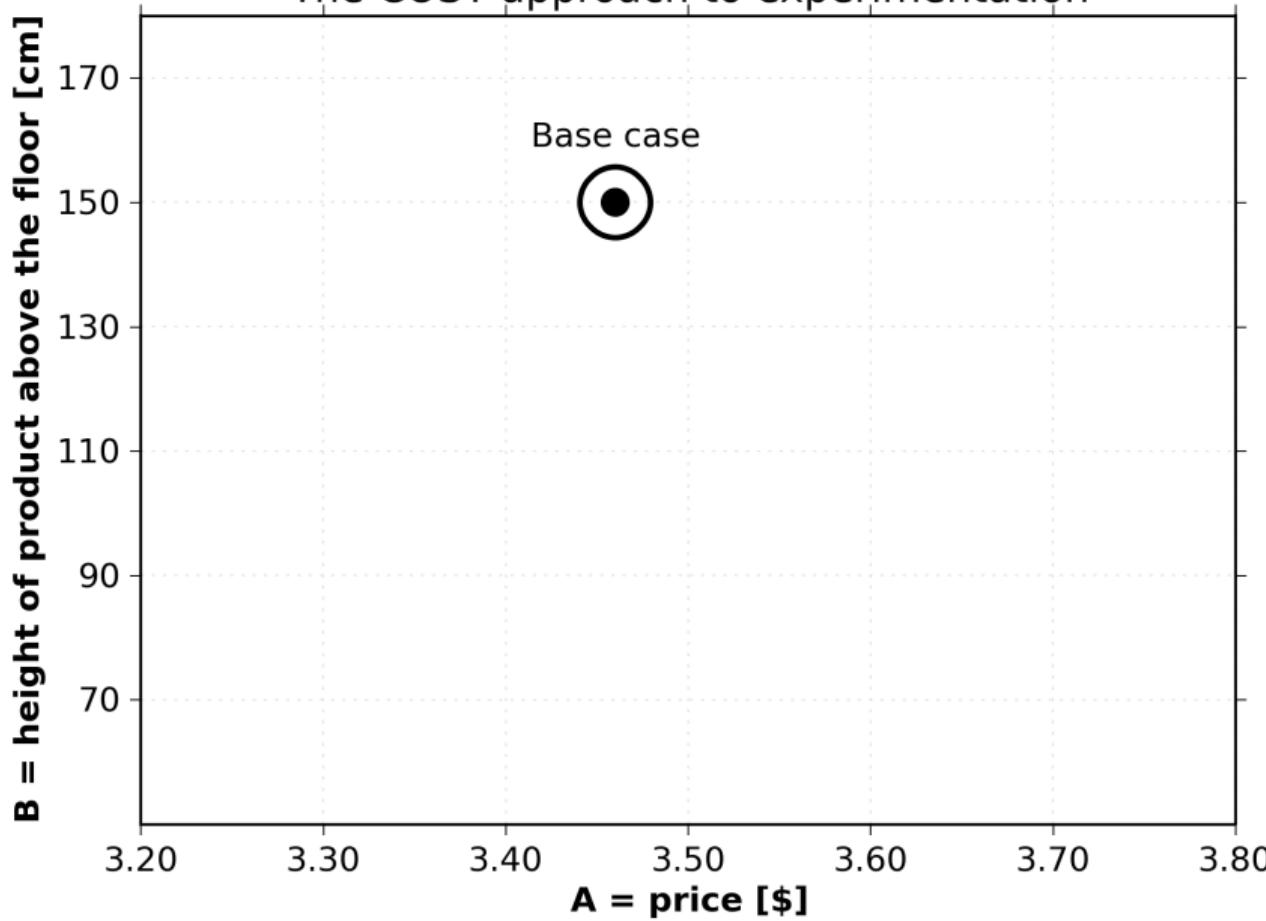
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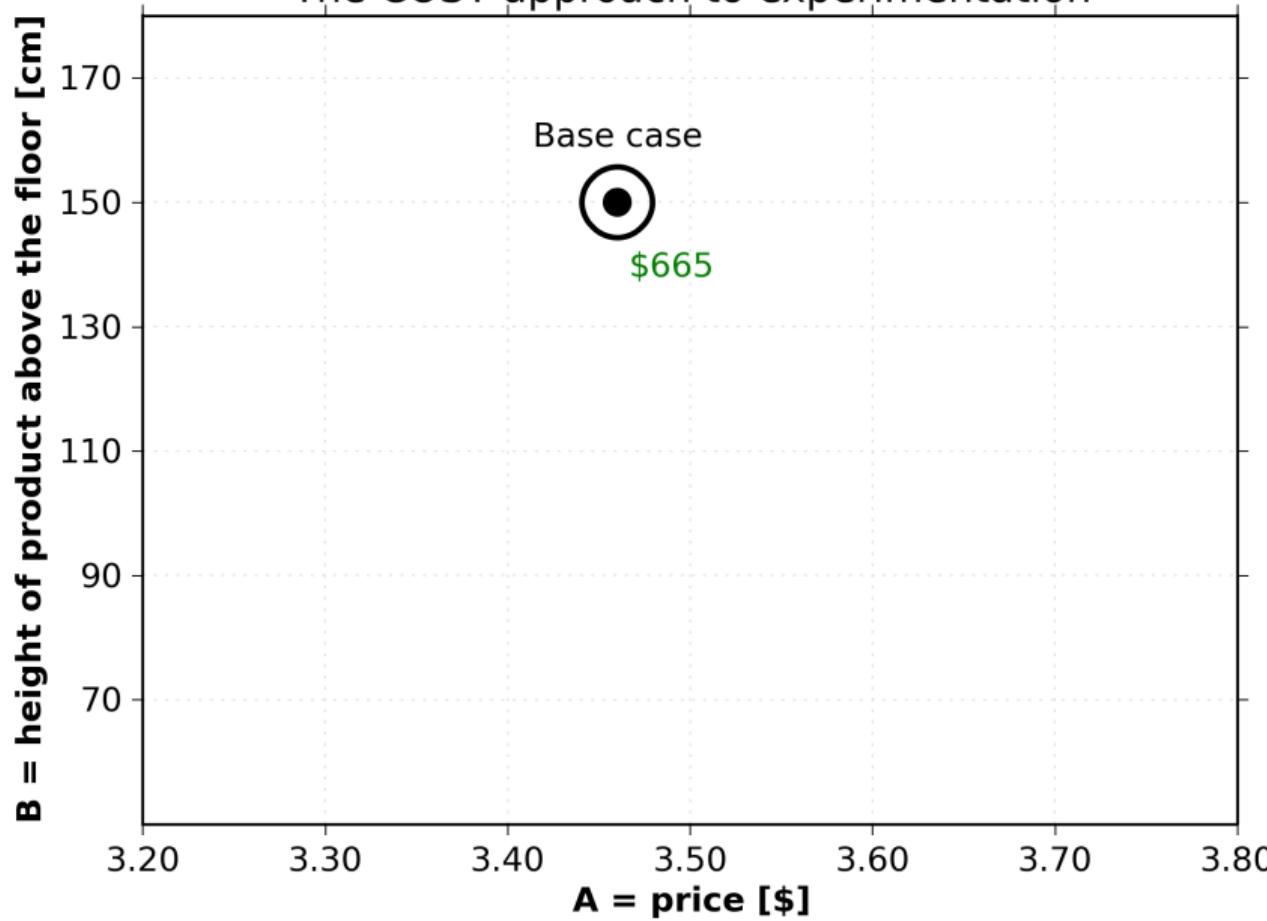


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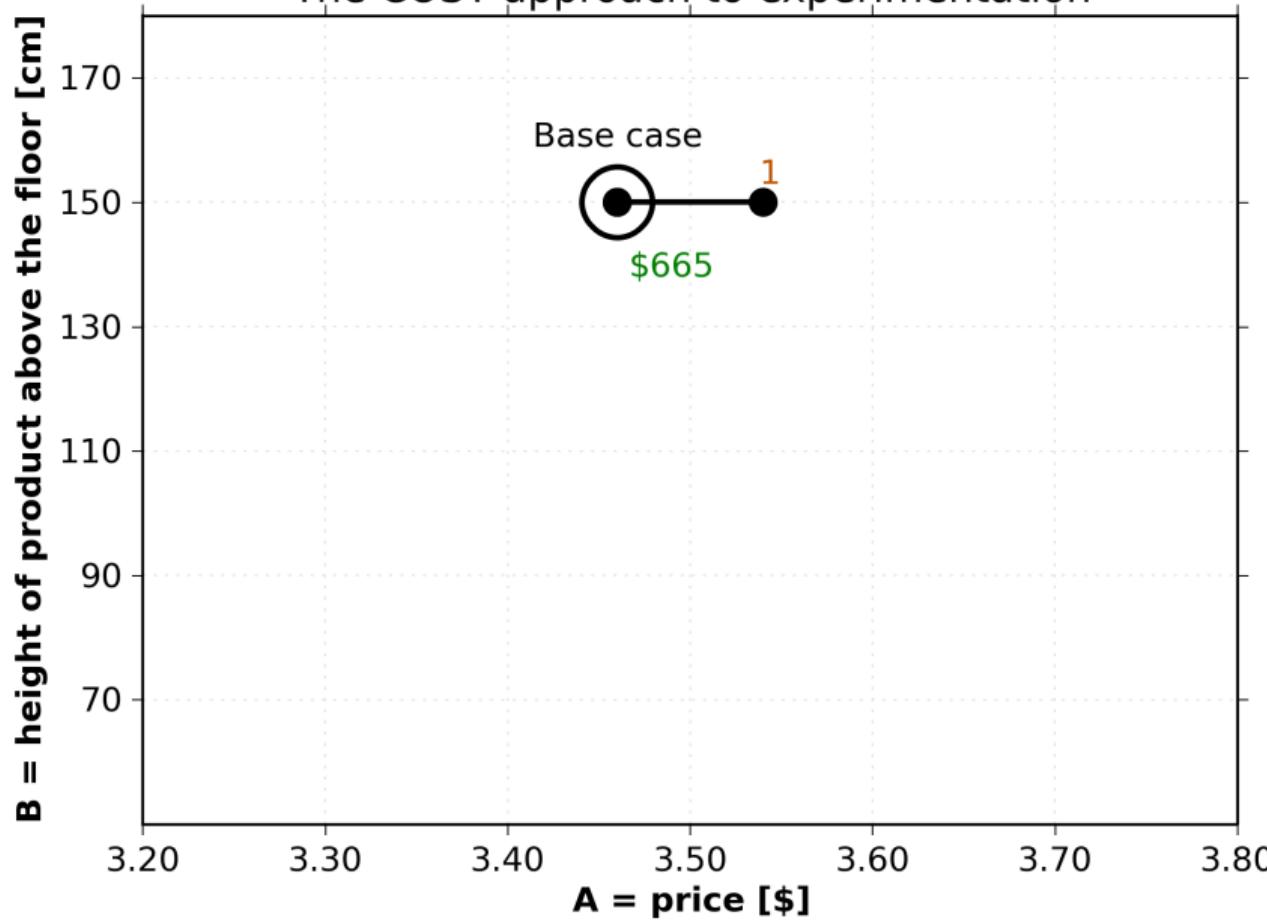
The COST approach to experimentation



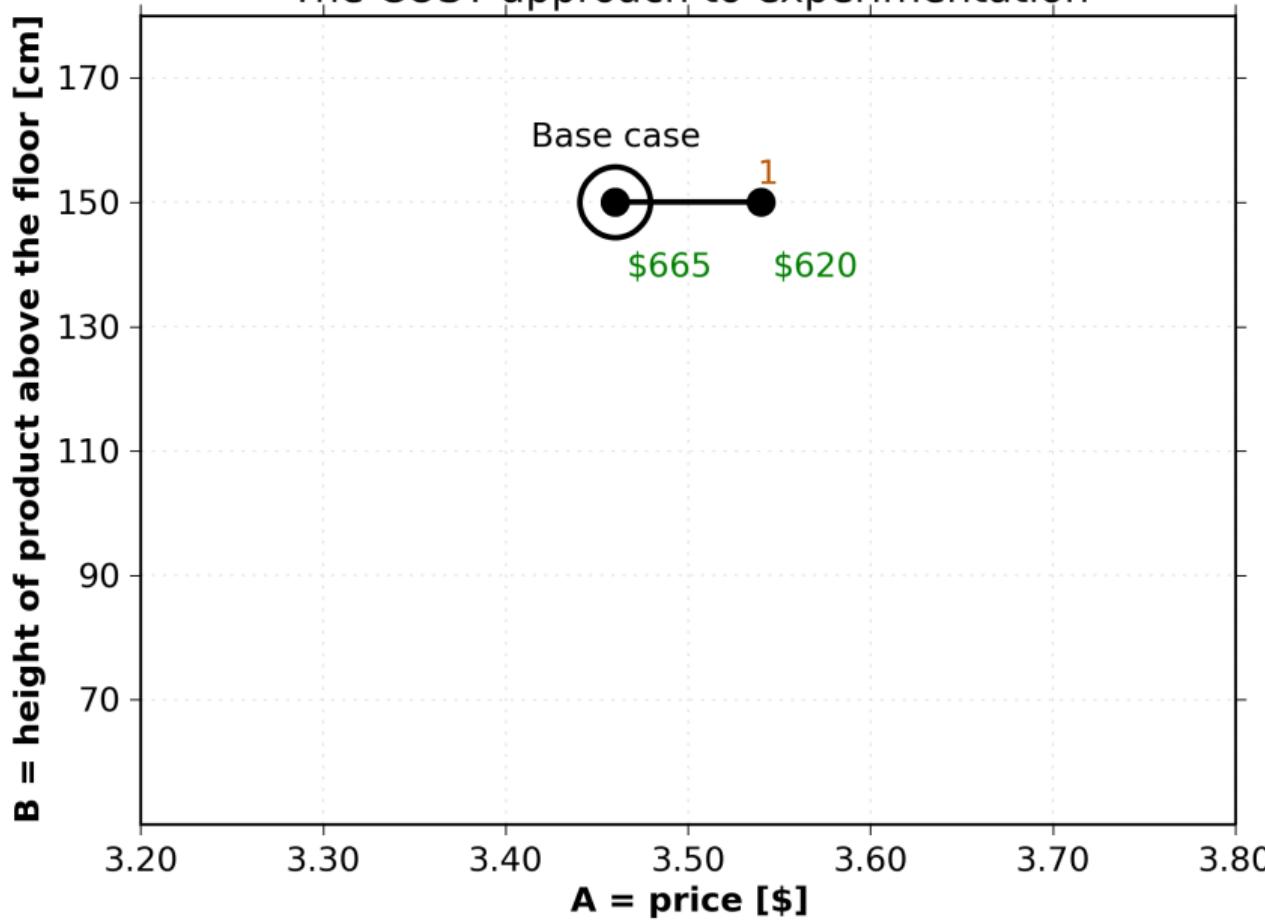
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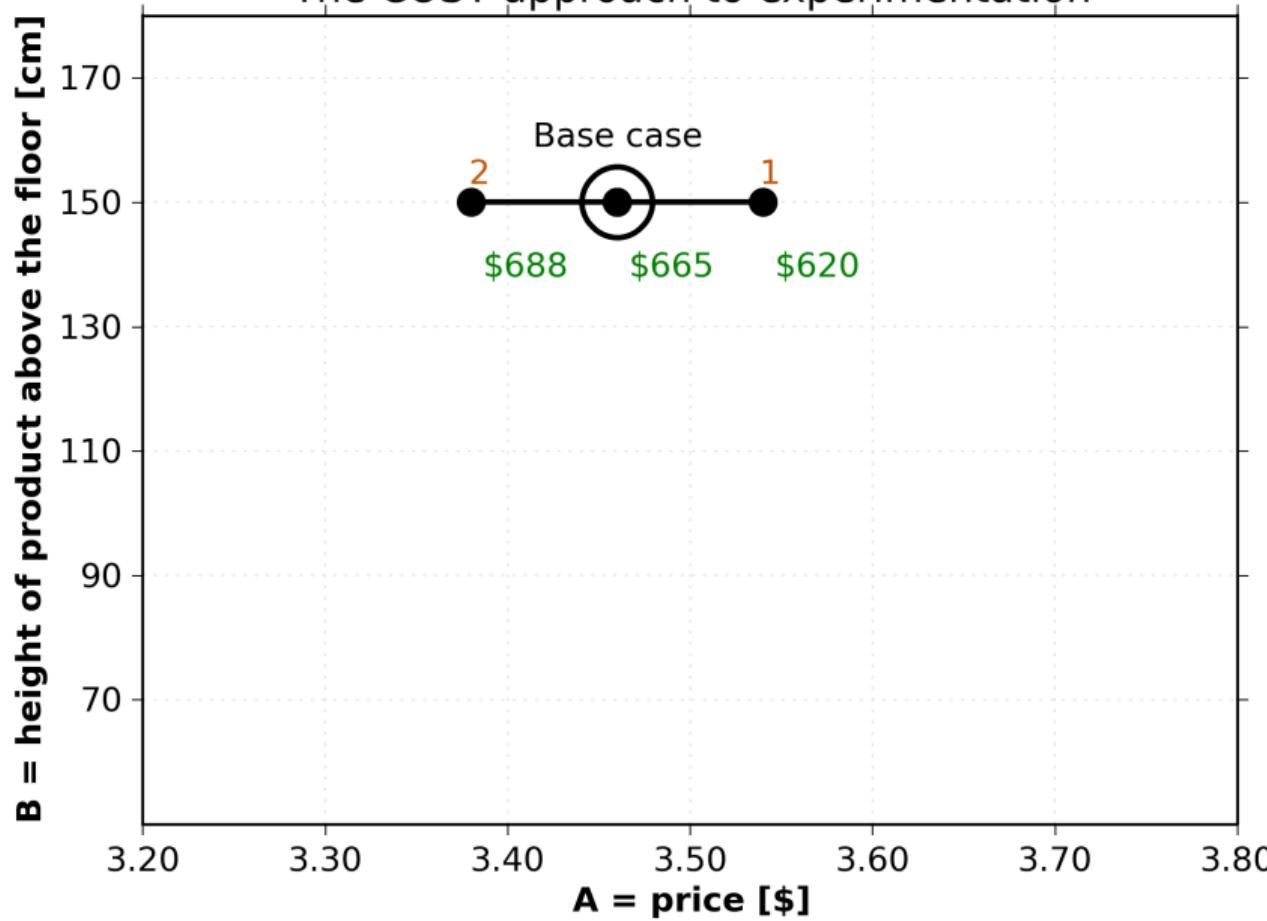
The COST approach to experimentation



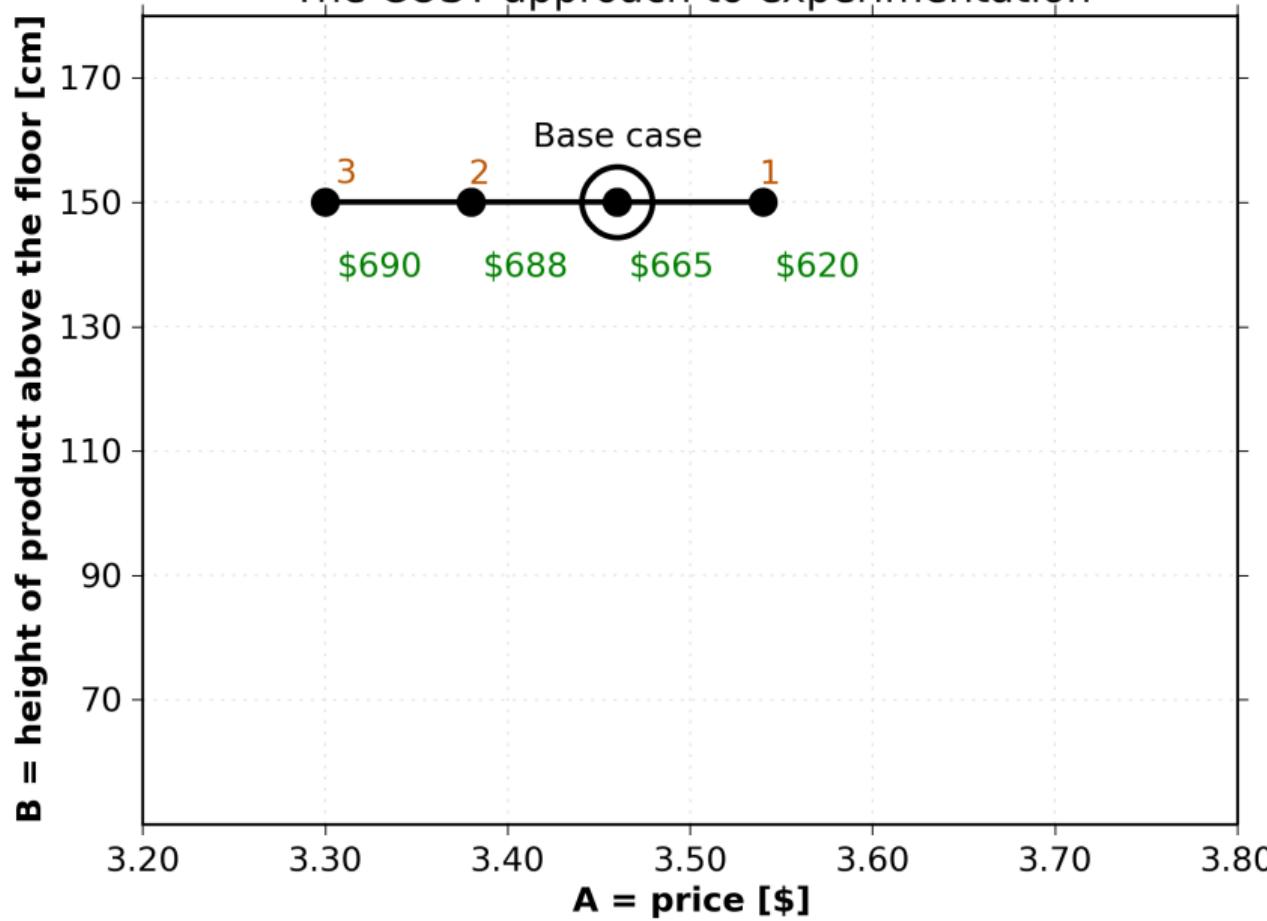
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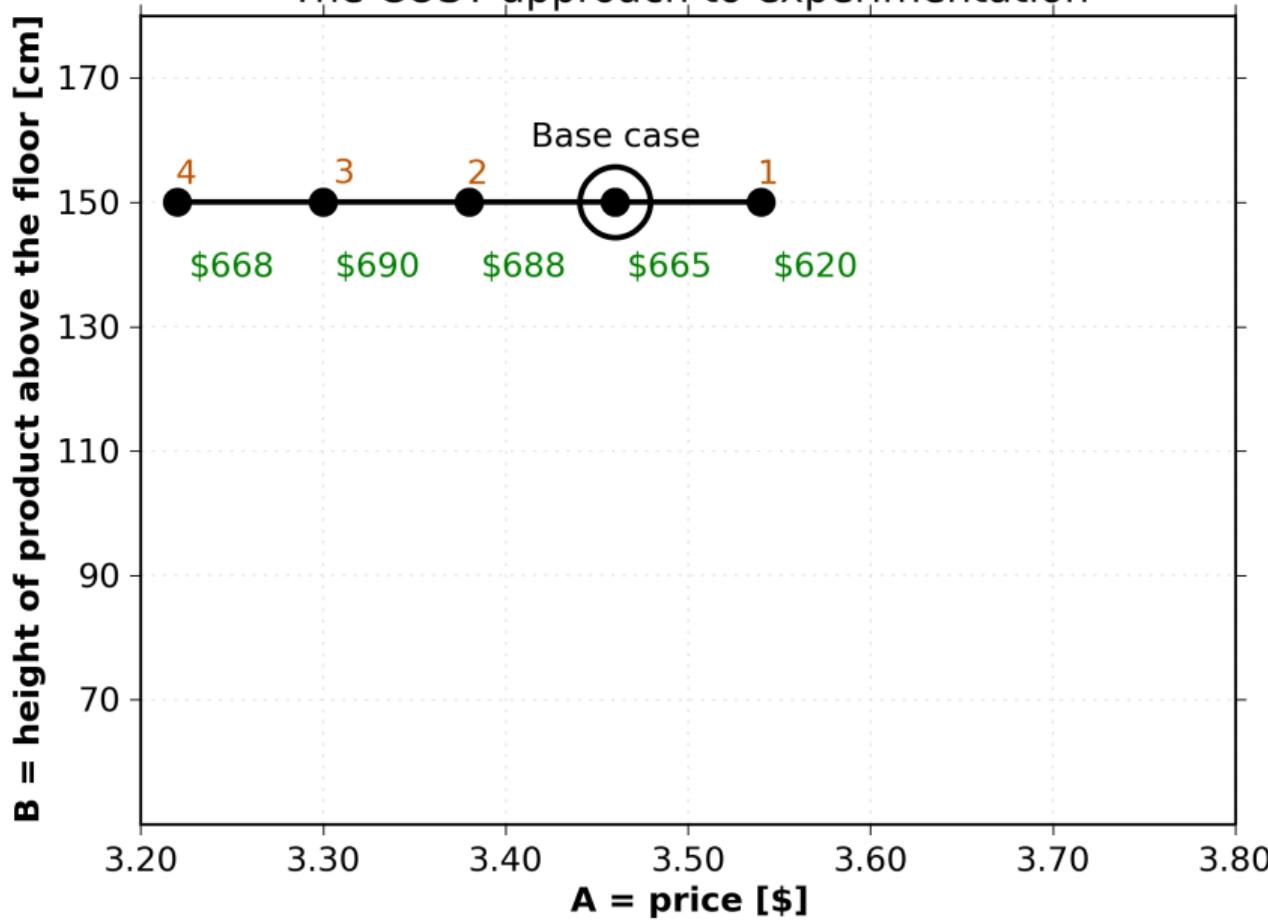
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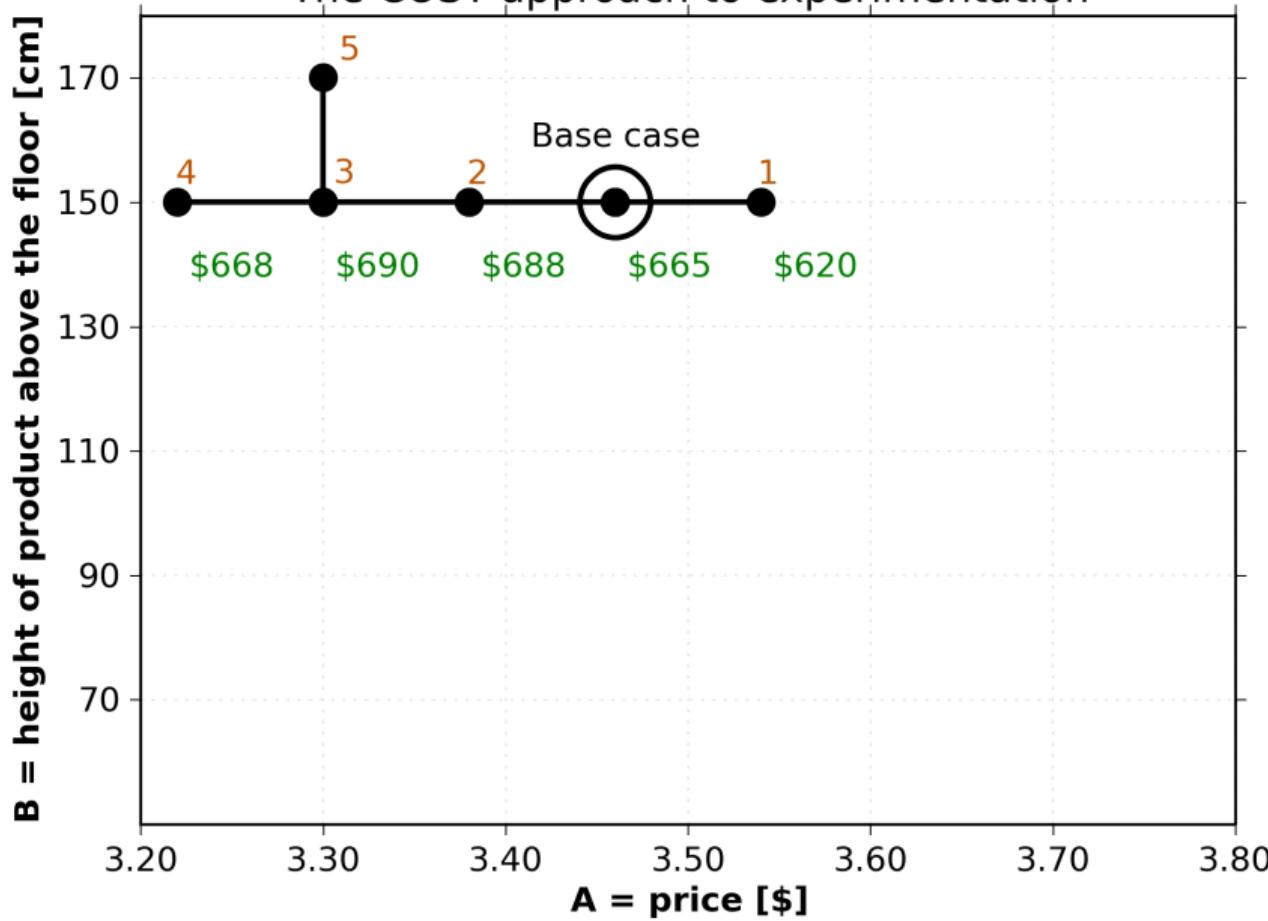
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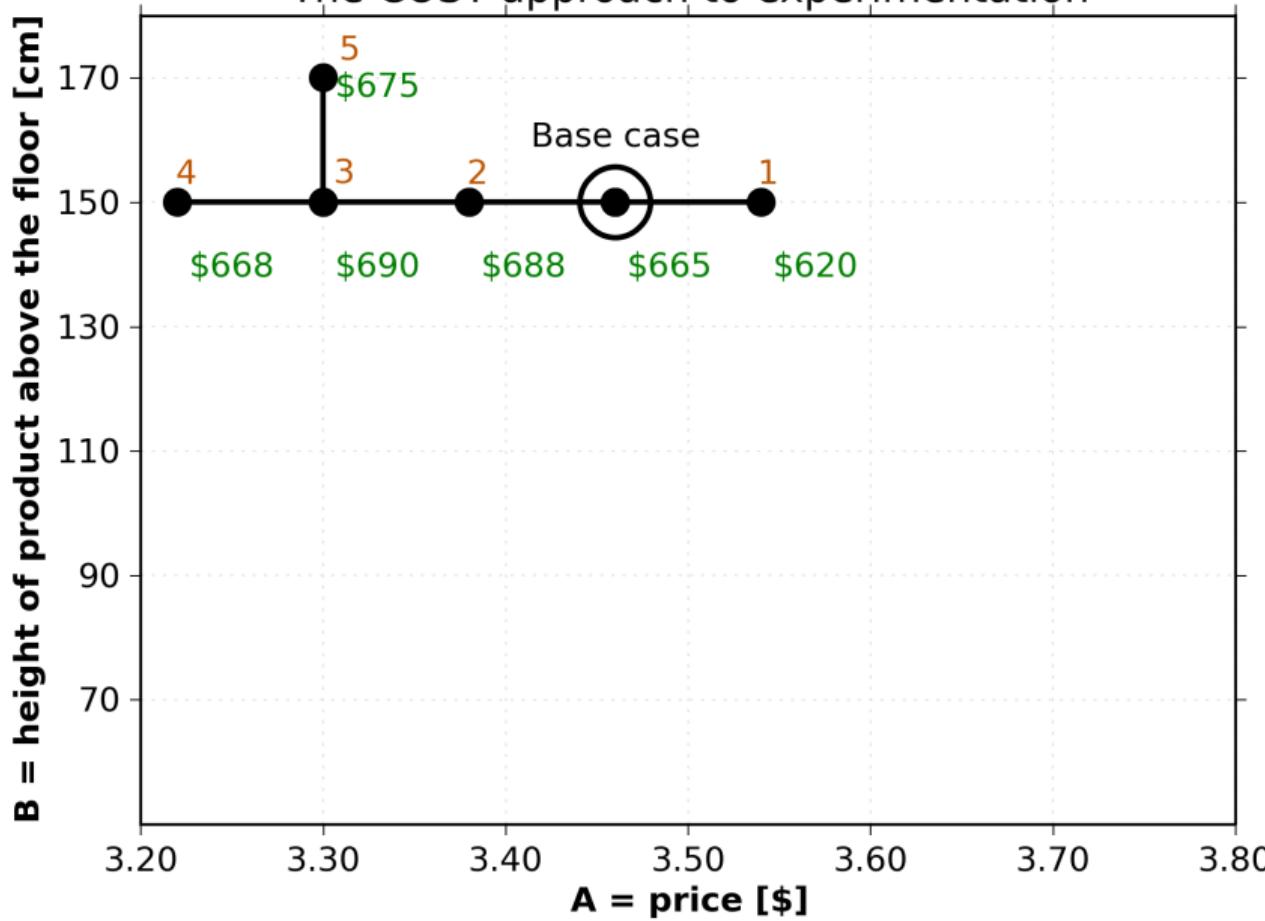
The COST approach to experimentation



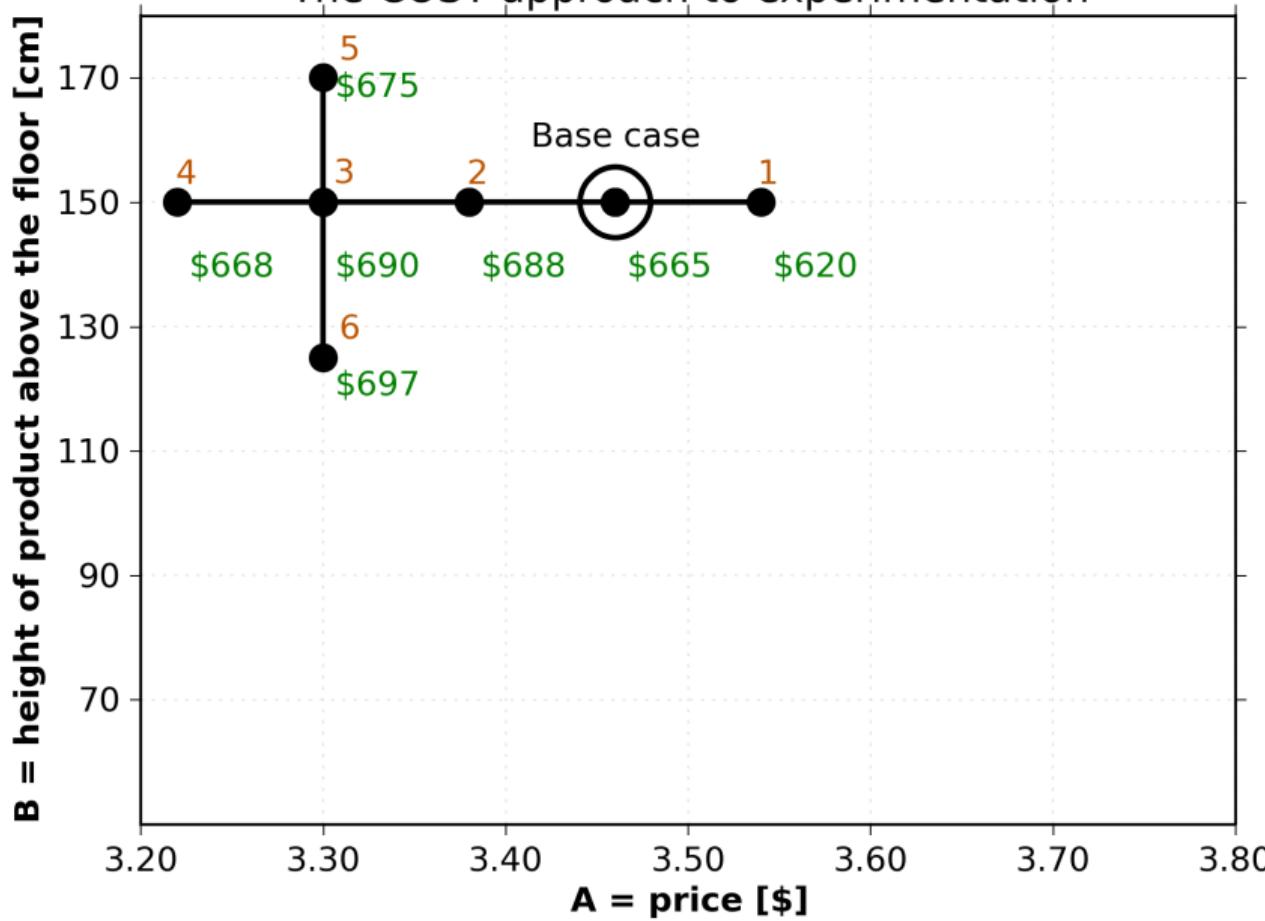
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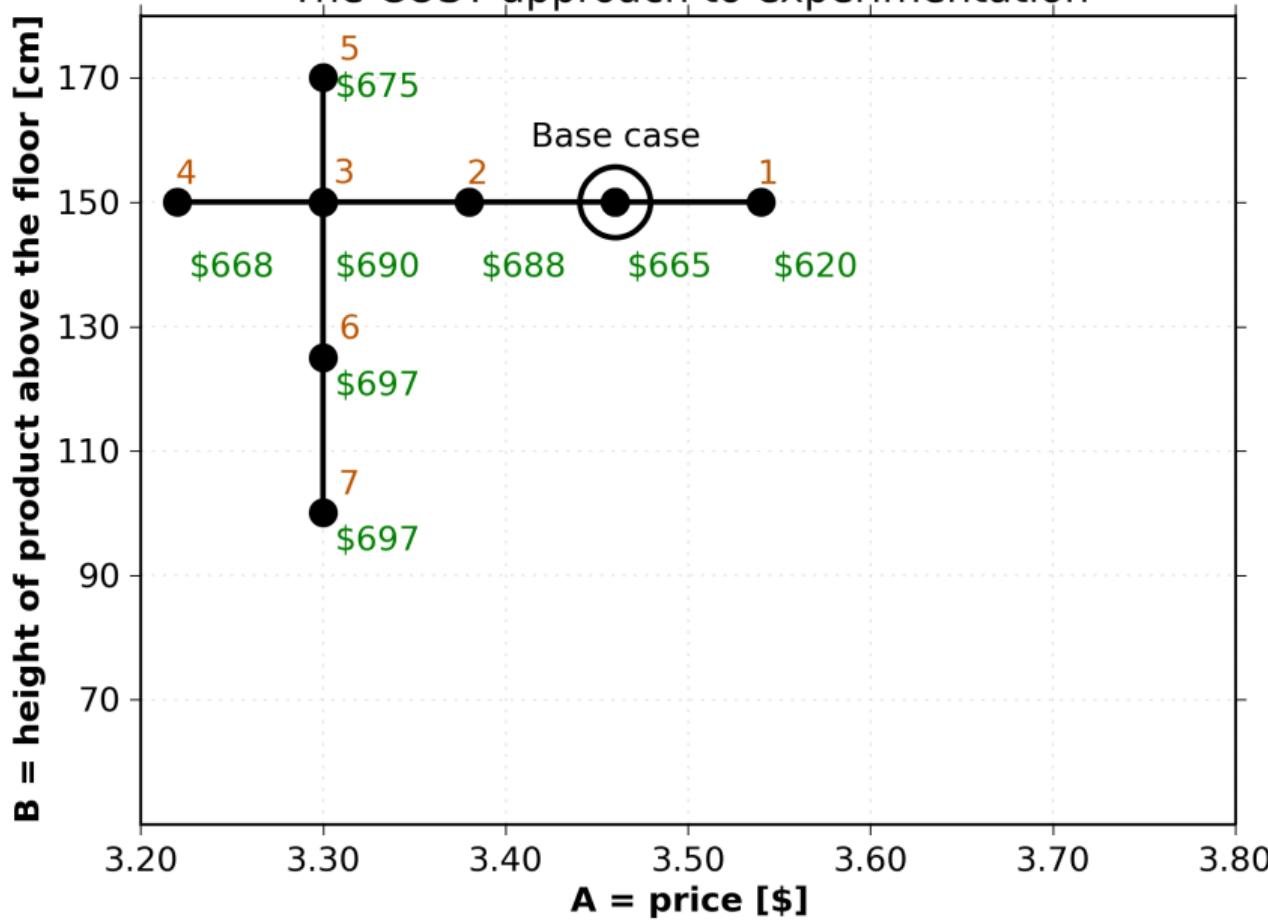
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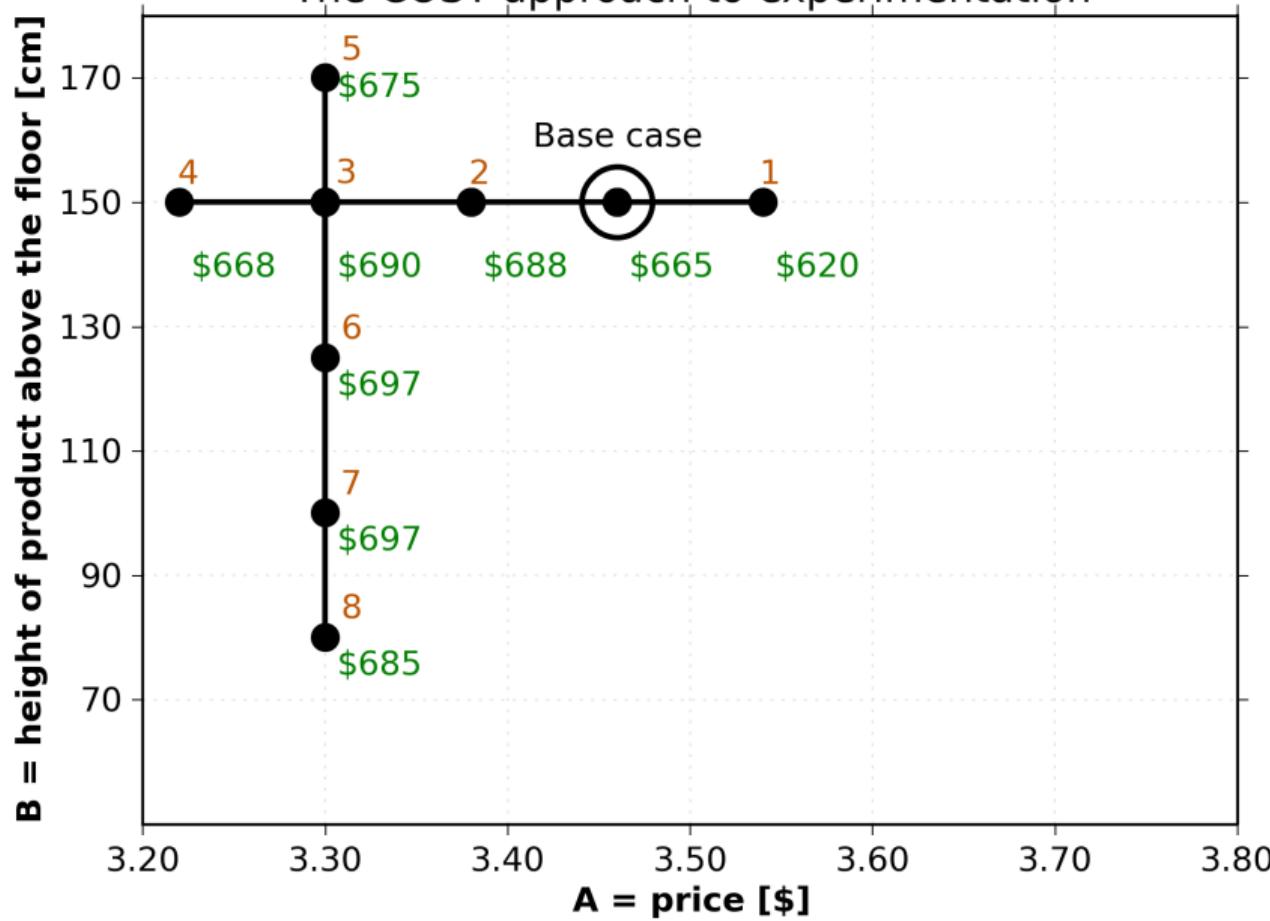
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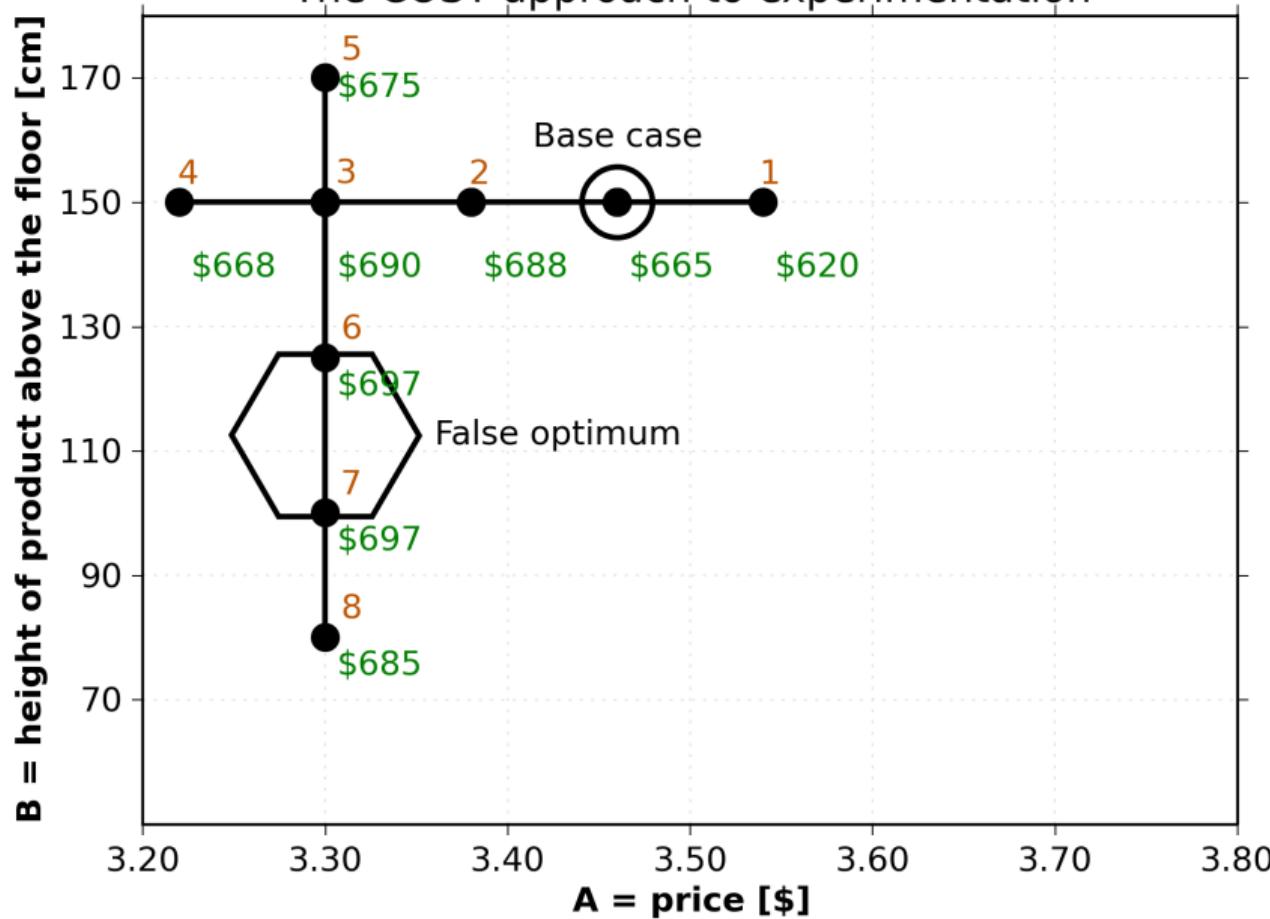
The COST approach to experimentation



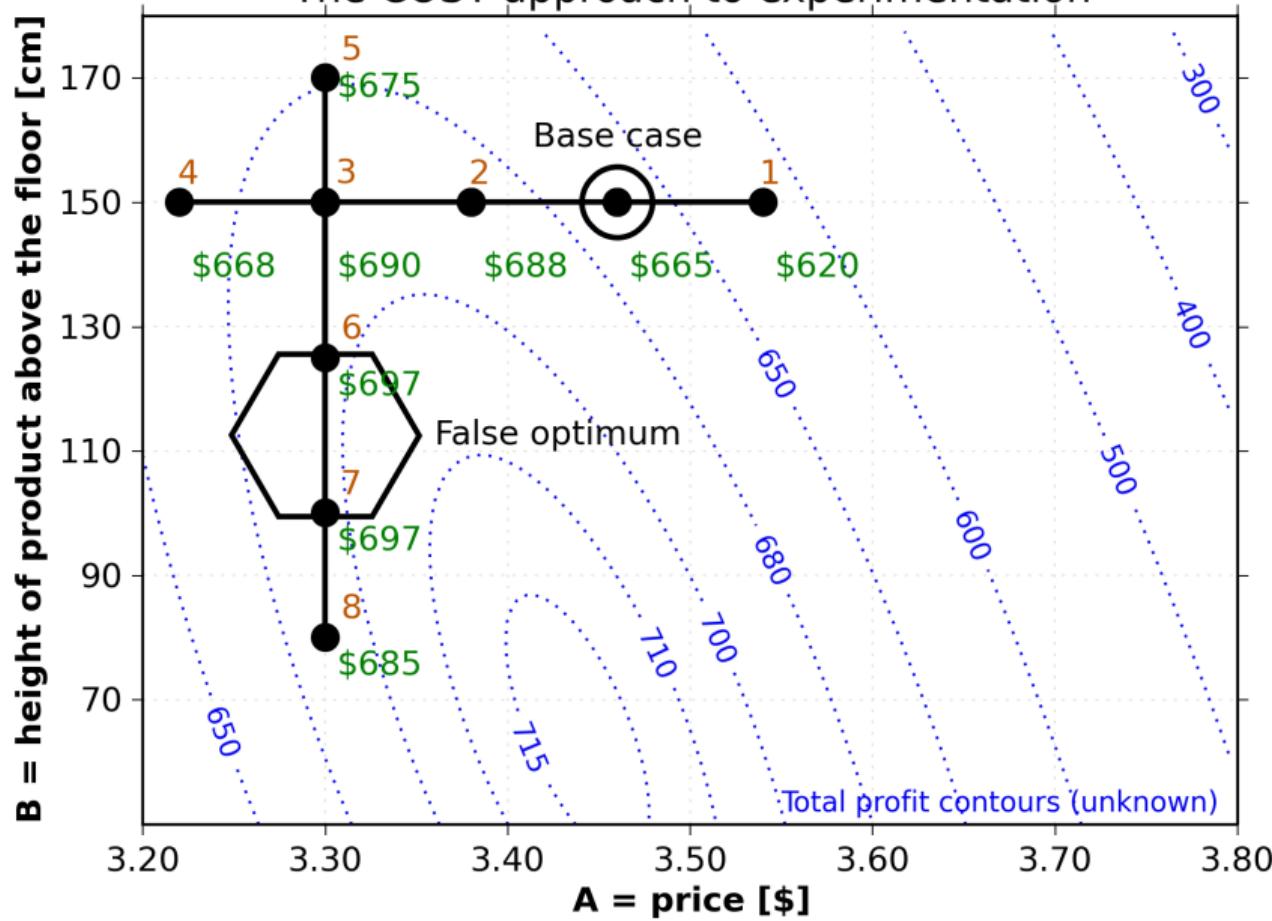
The COST approach to experimentation



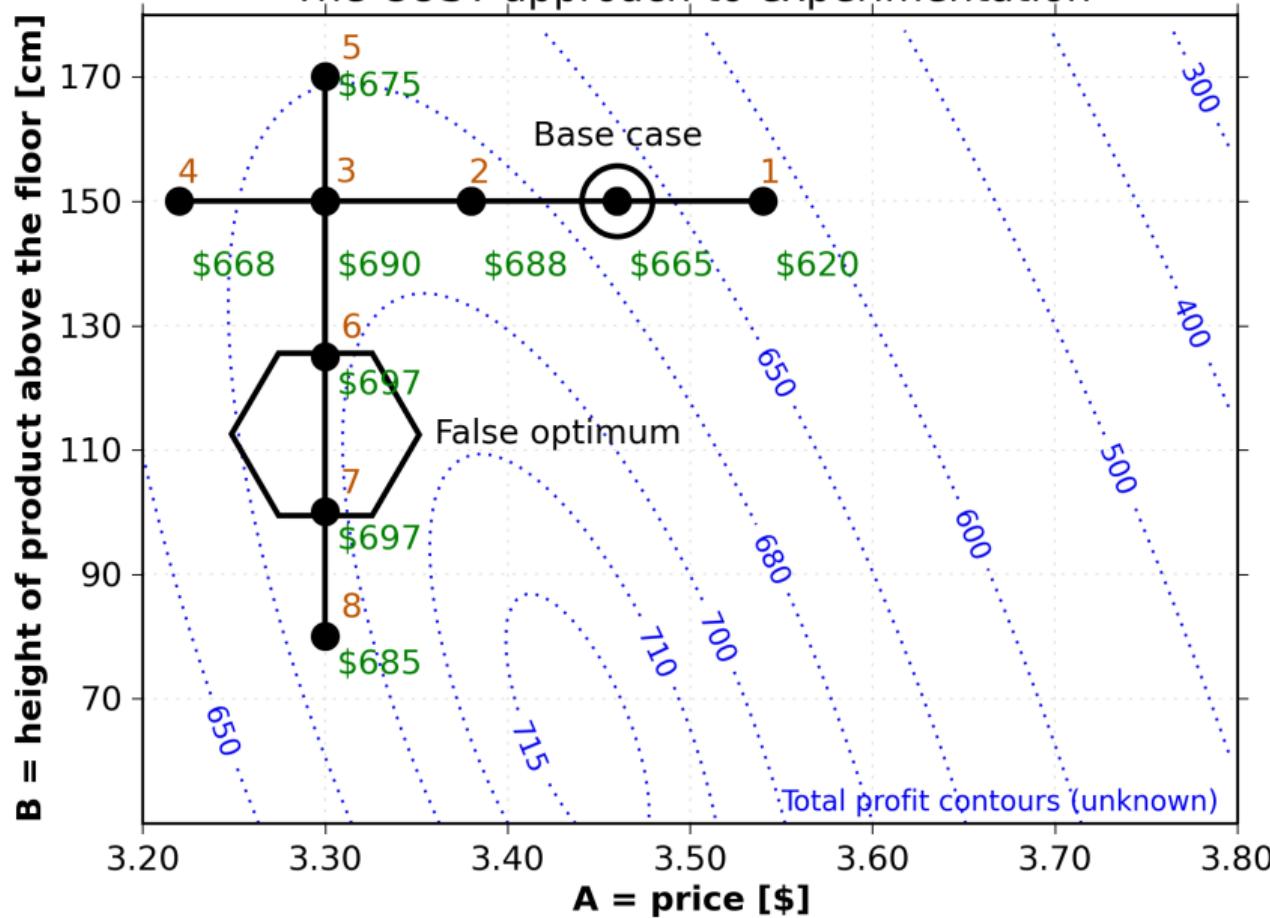
The COST approach to experimentation



The COST approach to experimentation

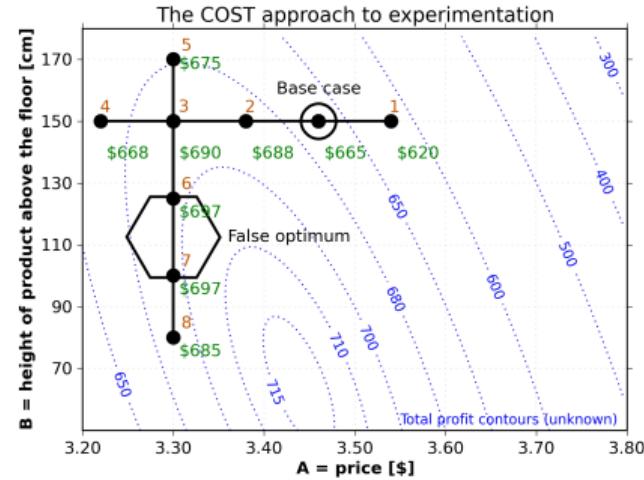


The COST approach to experimentation



The COST approach: “Change One Single Thing” at a time

- ▶ leads you into a false belief that you have reached the optimum
- ▶ COST can possibly work in 2-dimensions, and maybe with 3 variables
- ▶ but the chance you hit the optimum gets lower
- ▶ interactions and other unusual surface shapes makes COST inefficient
- ▶ OFAT = one factor at a time
(another name for COST)



COST works in a lab: to prove a conclusive cause-effect relationship

Recall, RSM (response surface methods) is used **after** screening for known causal factors