EPFLAgent: A Bidding Strategy for TAC/AA

Luděk Cigler, Elias Mirza

Artificial Intelligence Laboratory
Ecole Polytechnique Fédérale de Lausanne, Switzerland

Motivation

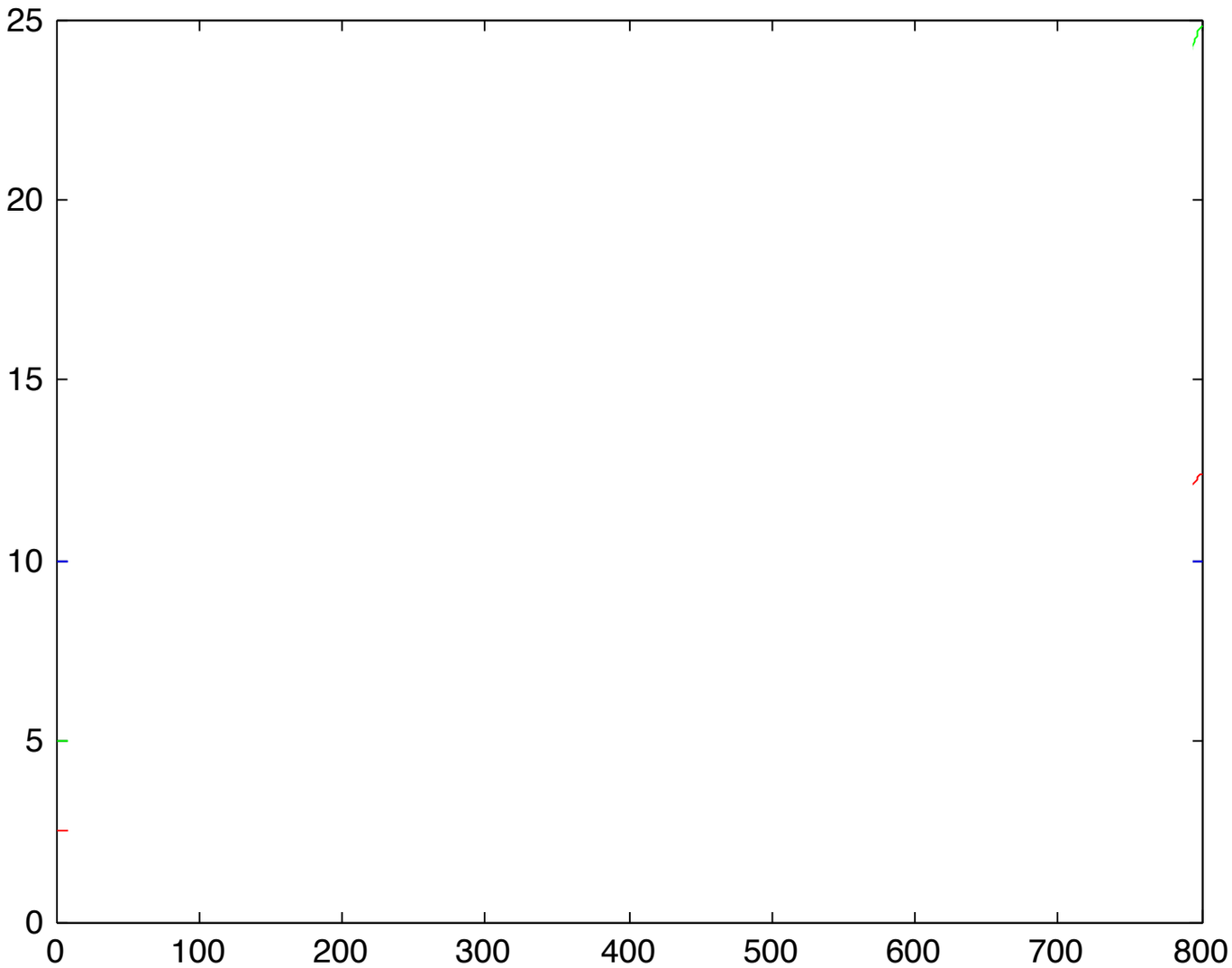
Motivation I: Specialization

Top 3 Agents Bottom 5 Agents

Source: The Bidding War, Balakrishnan & Wang, 2009

Motivation II: No budget limit

Revenue per conversion



Cost per conversion

Conversions

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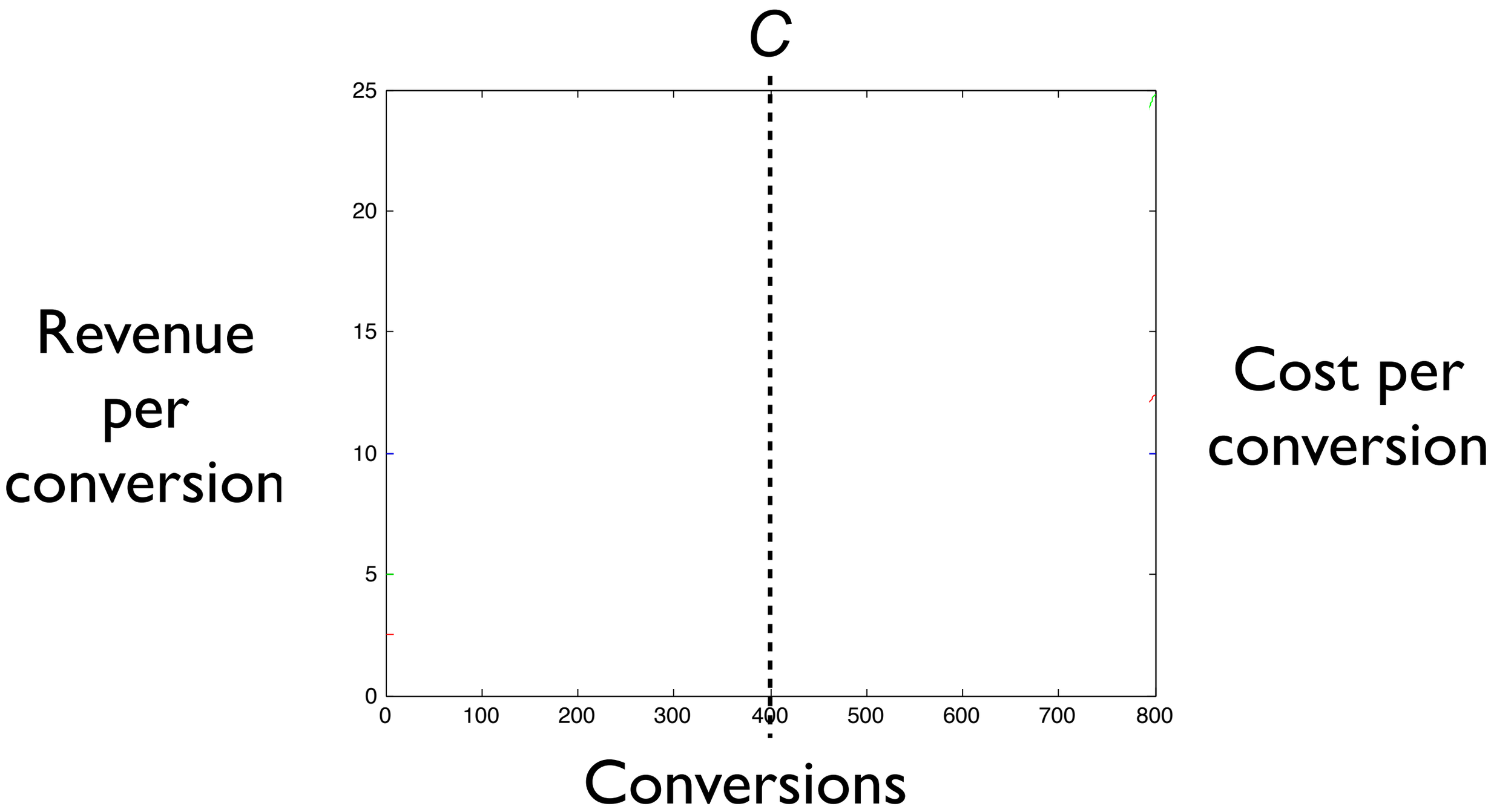

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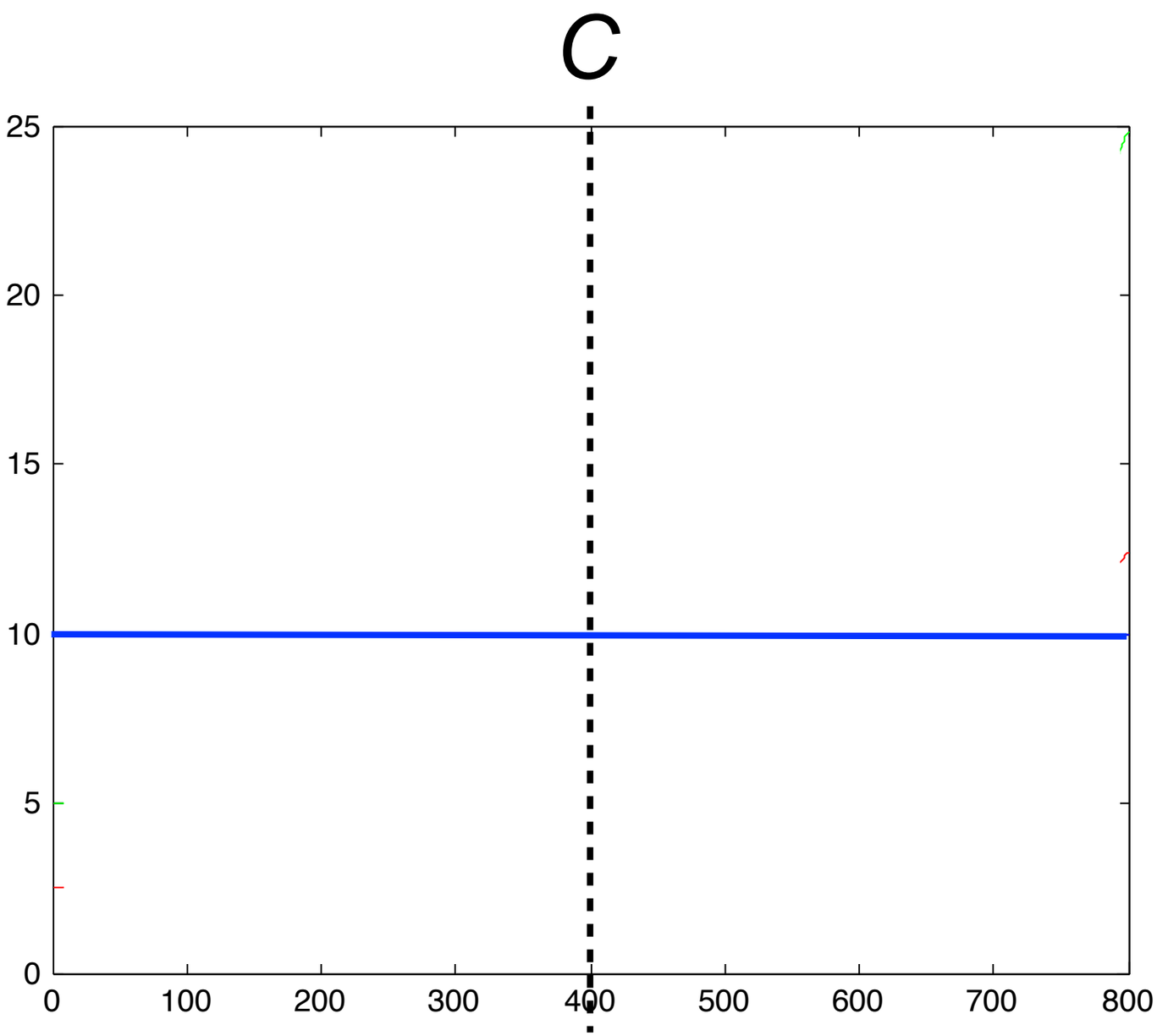

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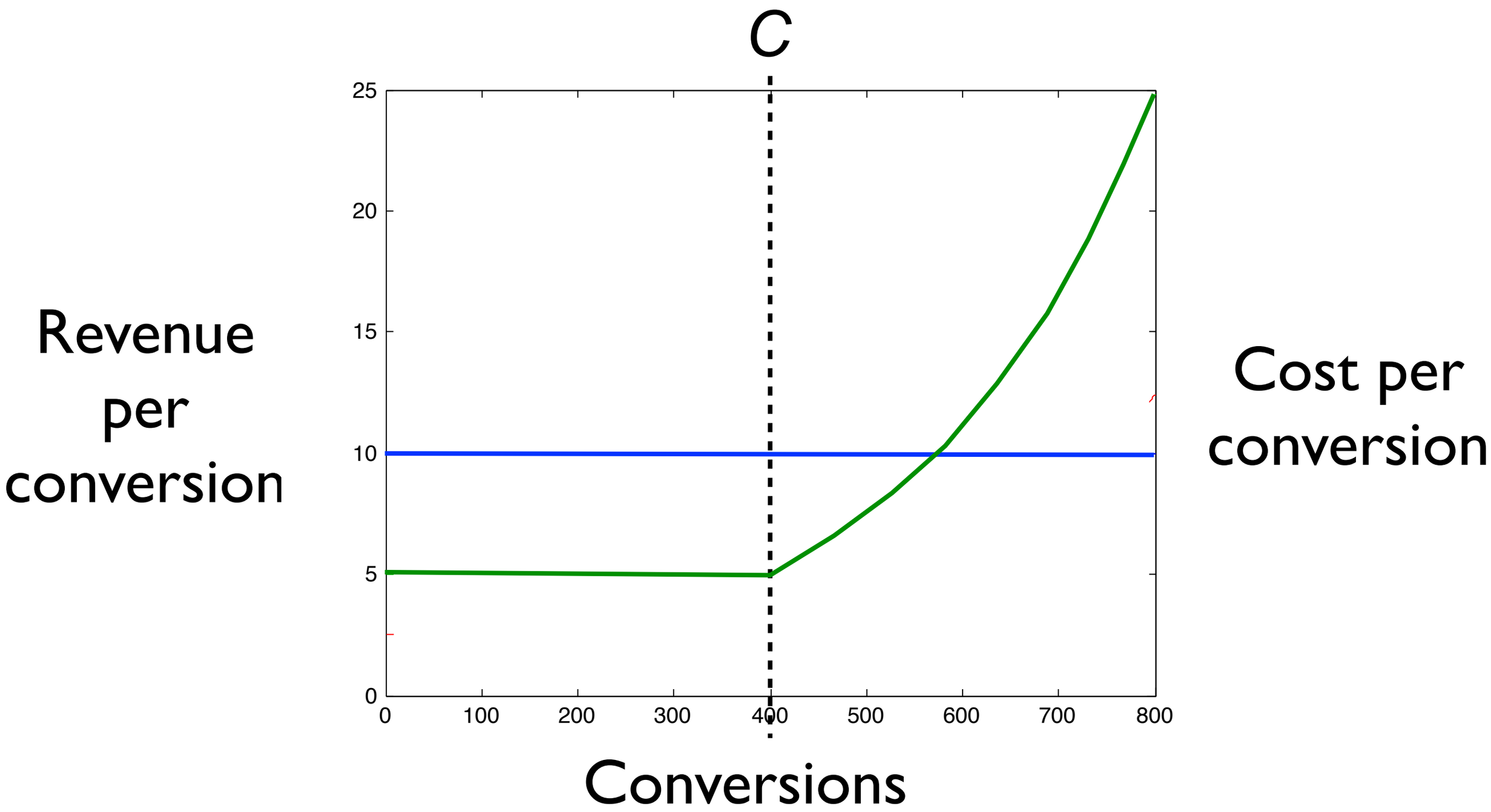

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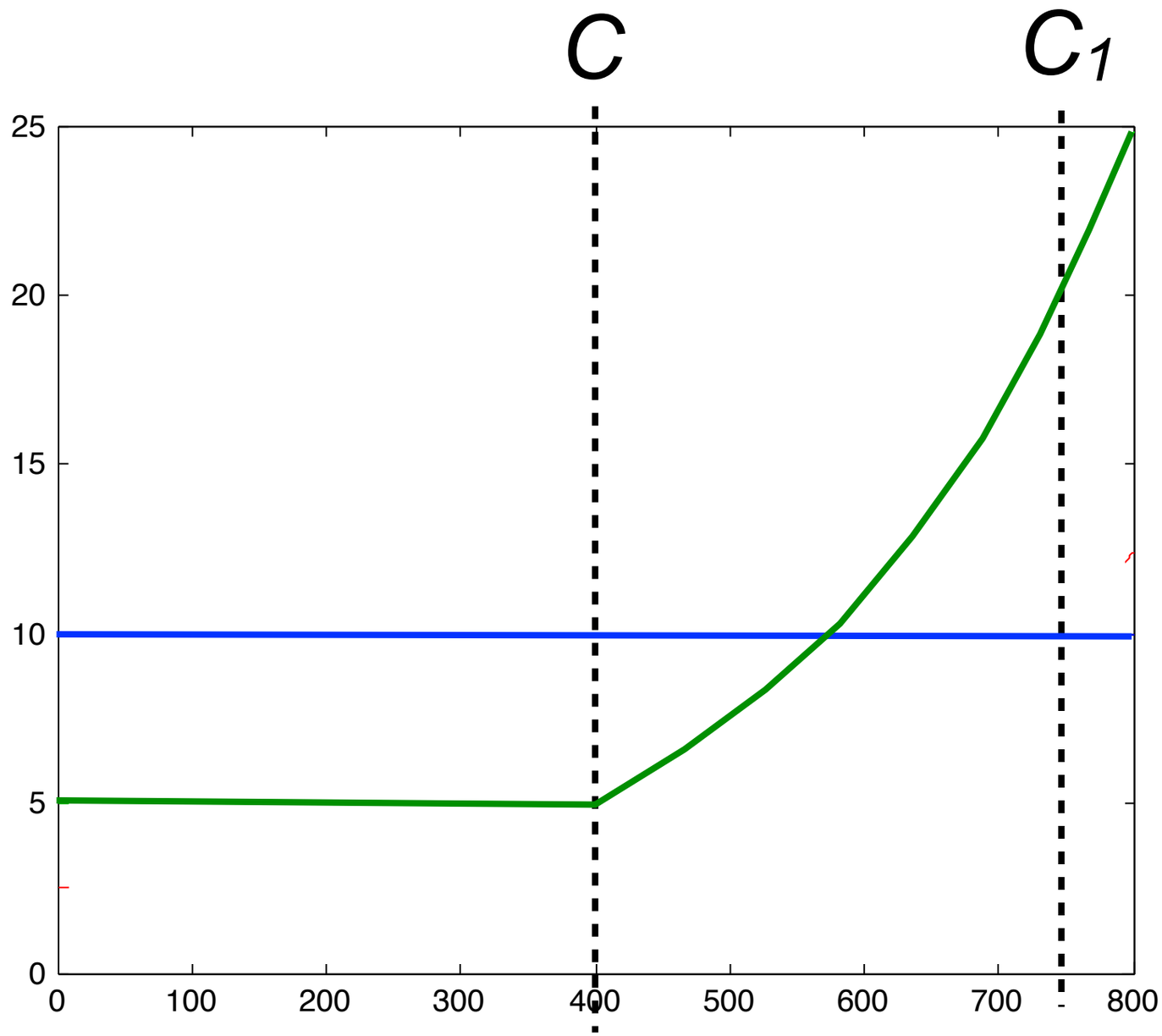

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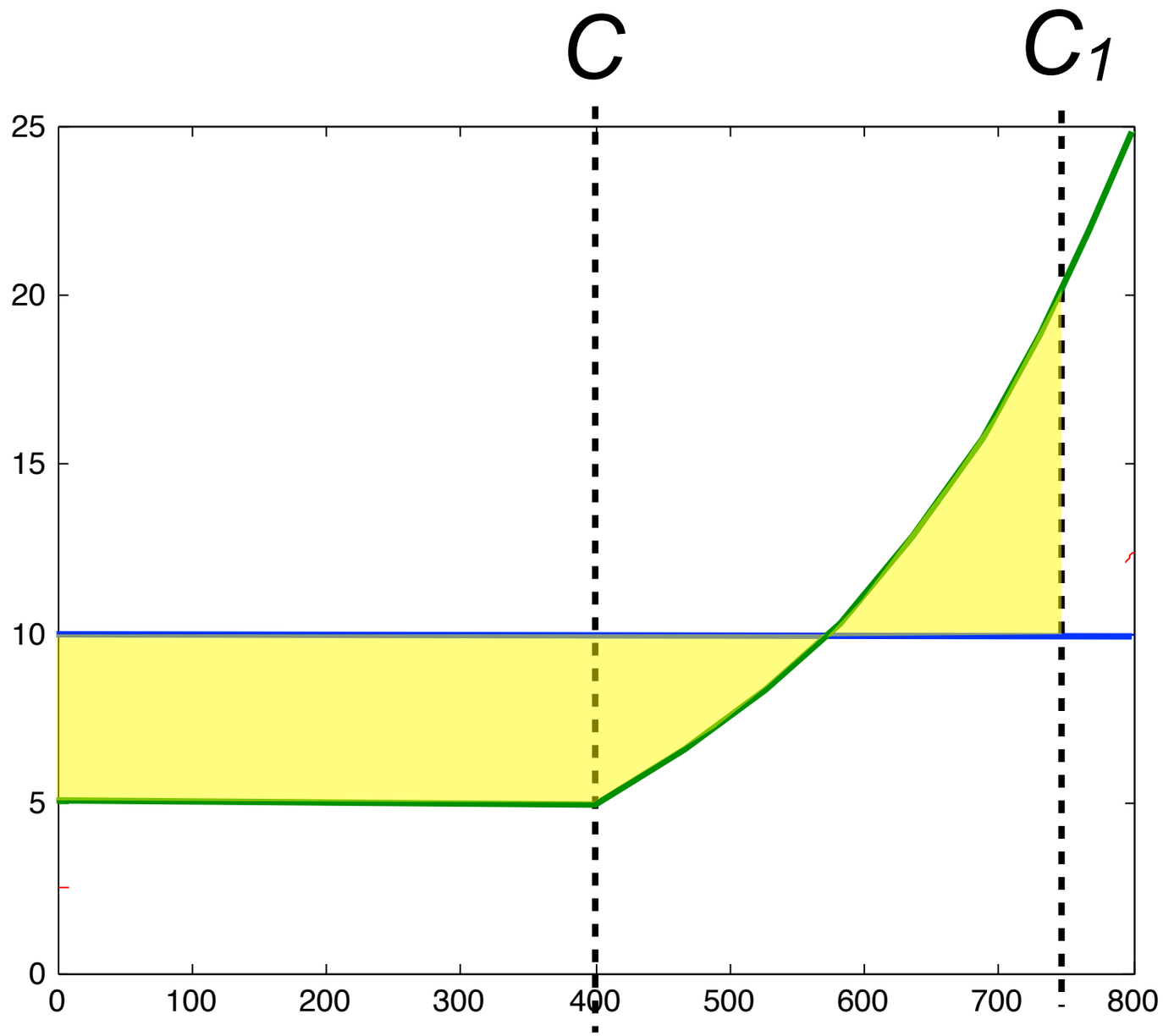

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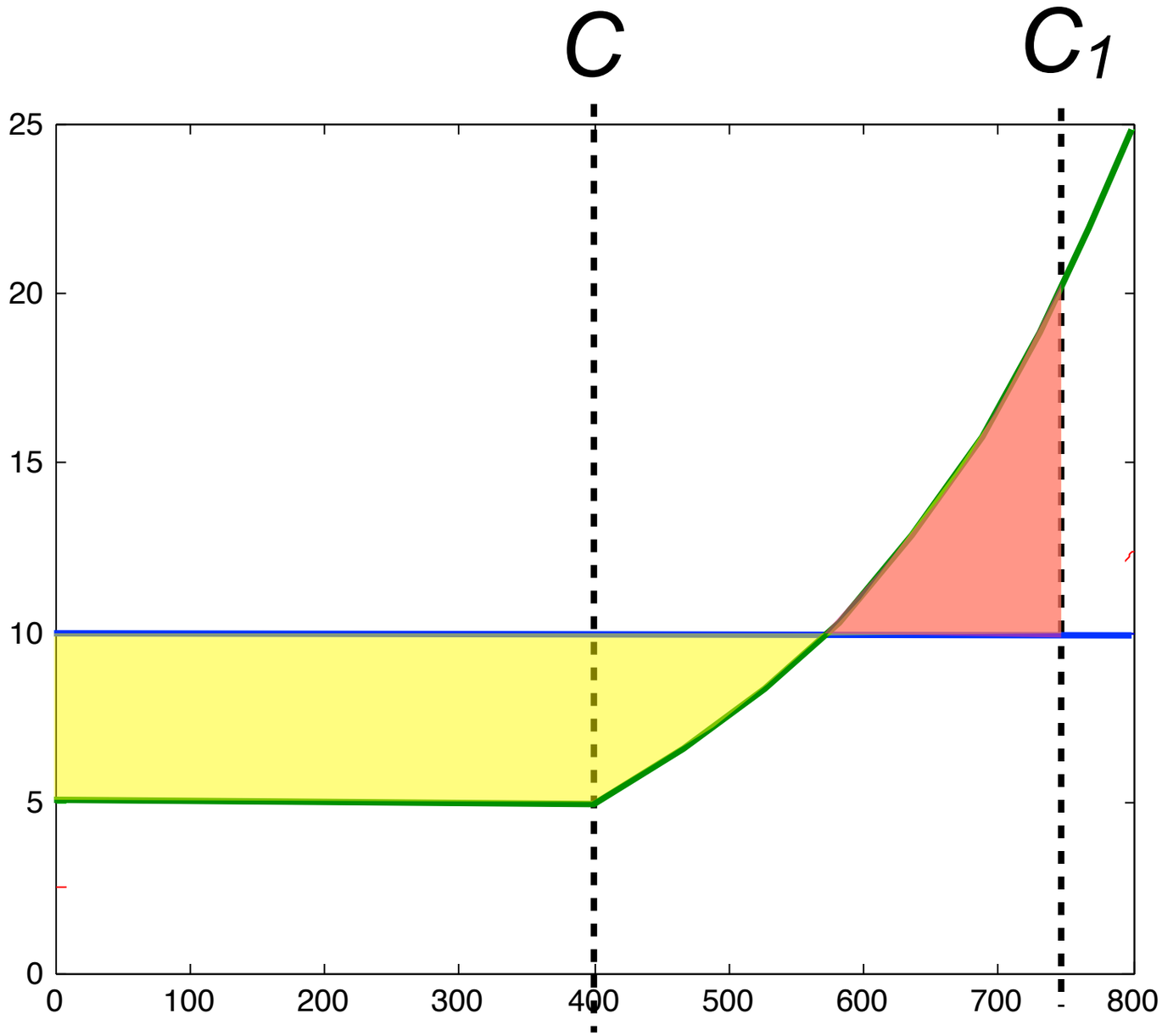

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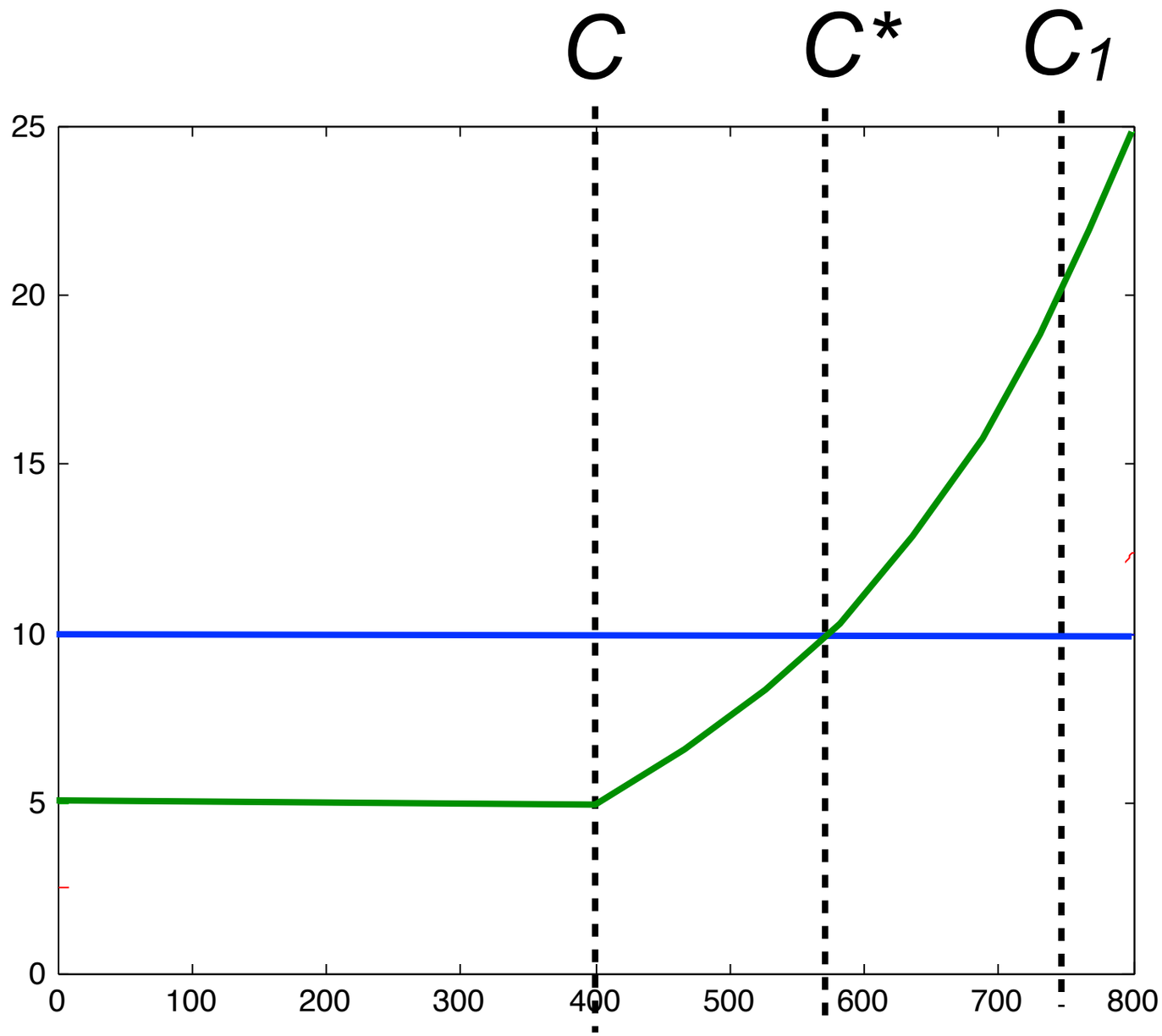

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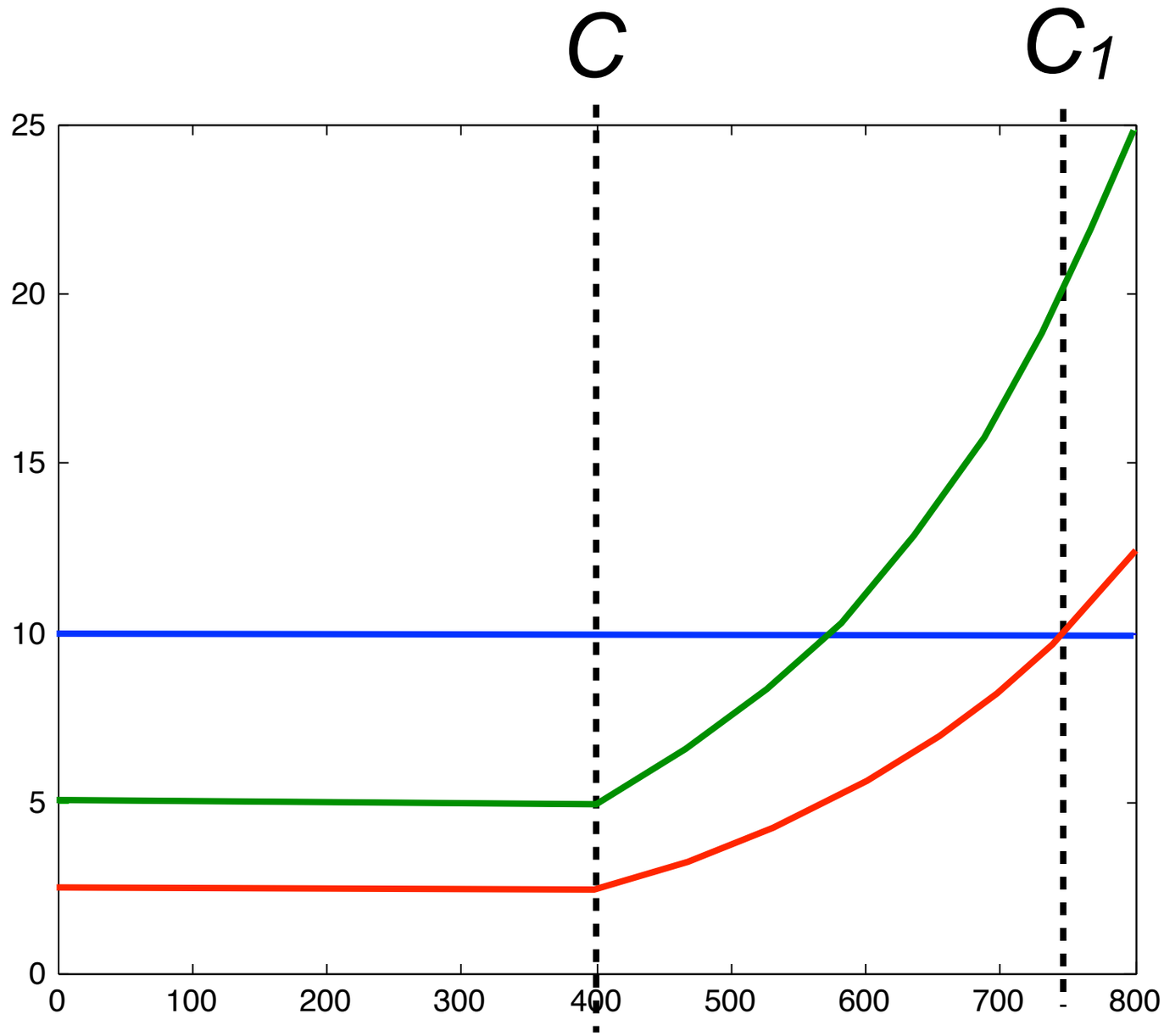

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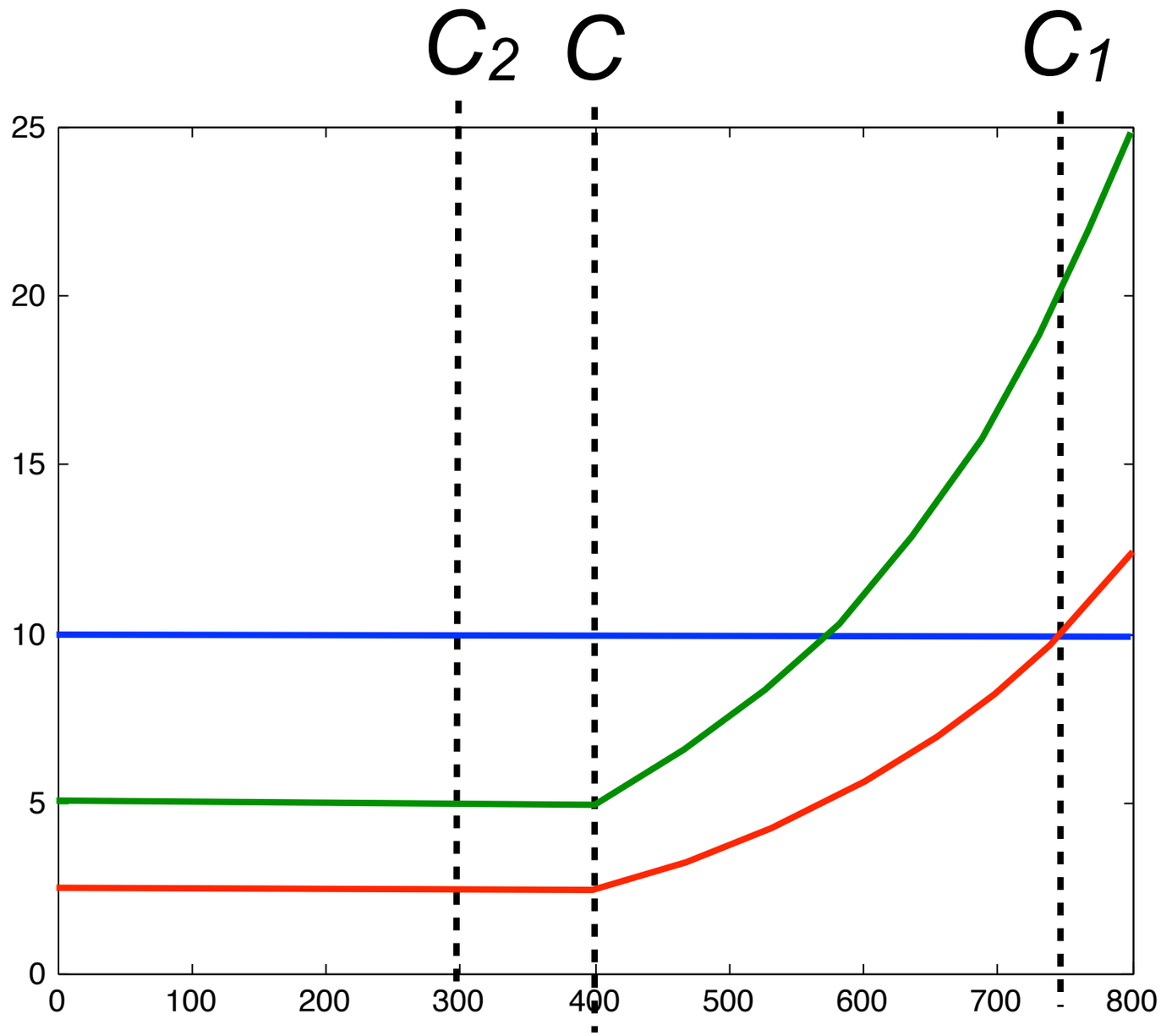

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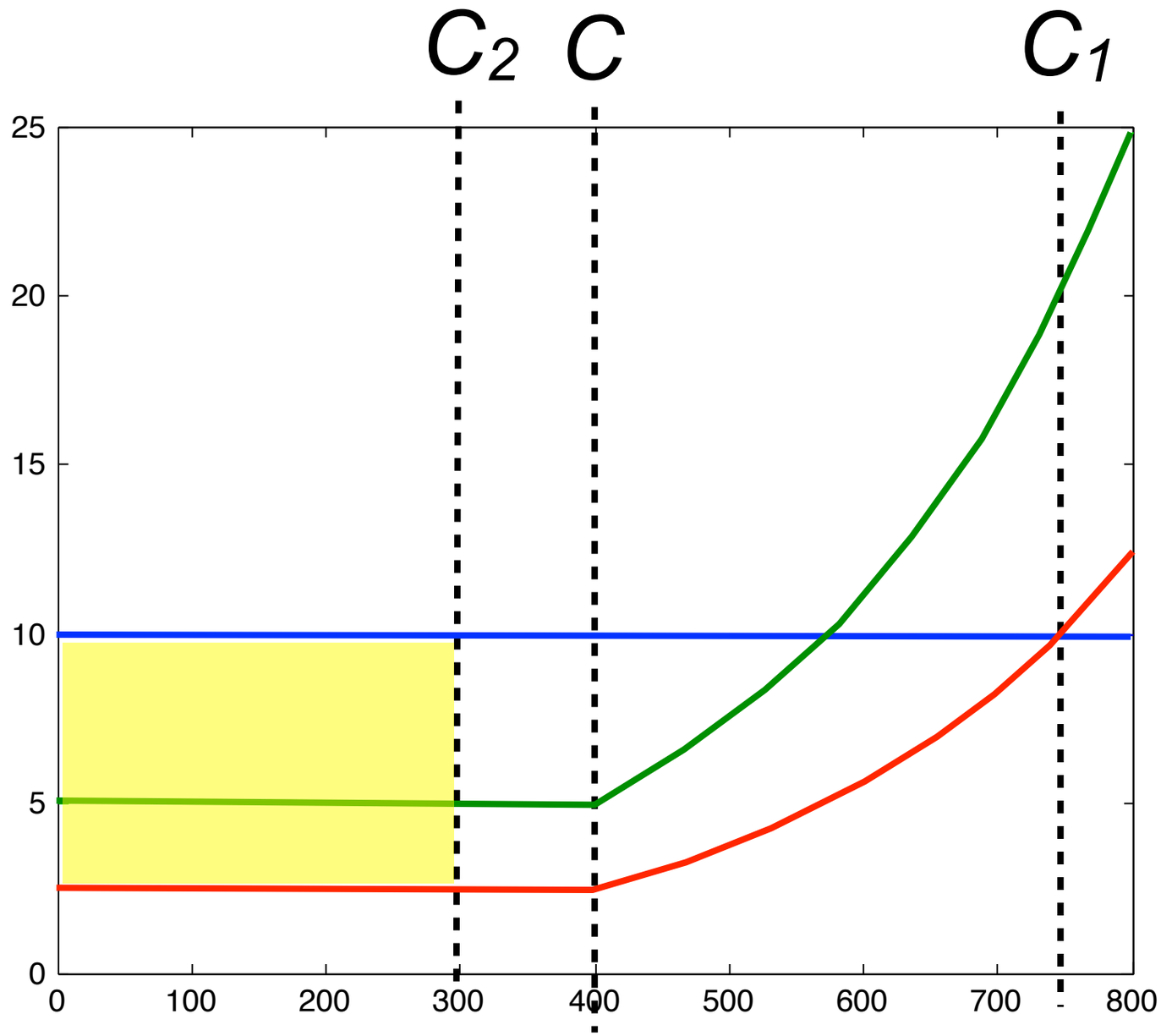

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- *Try to have the same profit-per-conversion from all the keywords*
- *Use all the available capacity (and a bit more)*

Our strategy

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- To know the profit-per-conversion:
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  - *Learn the conversion probability*
  - *Assume that we pay what we bid*
- daily capacity = (total capacity)/(distribution window)

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2. If we *didn't exceed* (daily capacity + slack), *increase* the bid on the *most profitable keyword* for which we are not in the highest slot

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- Good strategies specialize
- Setting budget limit doesn't pay off
- Simple strategy: try to use up all the capacity, keep the same profits-per-conversion on all keywords

Thank you!