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Convex Hull

Lower Bound

- Sorting $\leq_N$ 2d-CH

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Lower Bound

- It's well known that

  $\Omega(n\log n)$ is a lower bound

  for SORTING

  in terms of

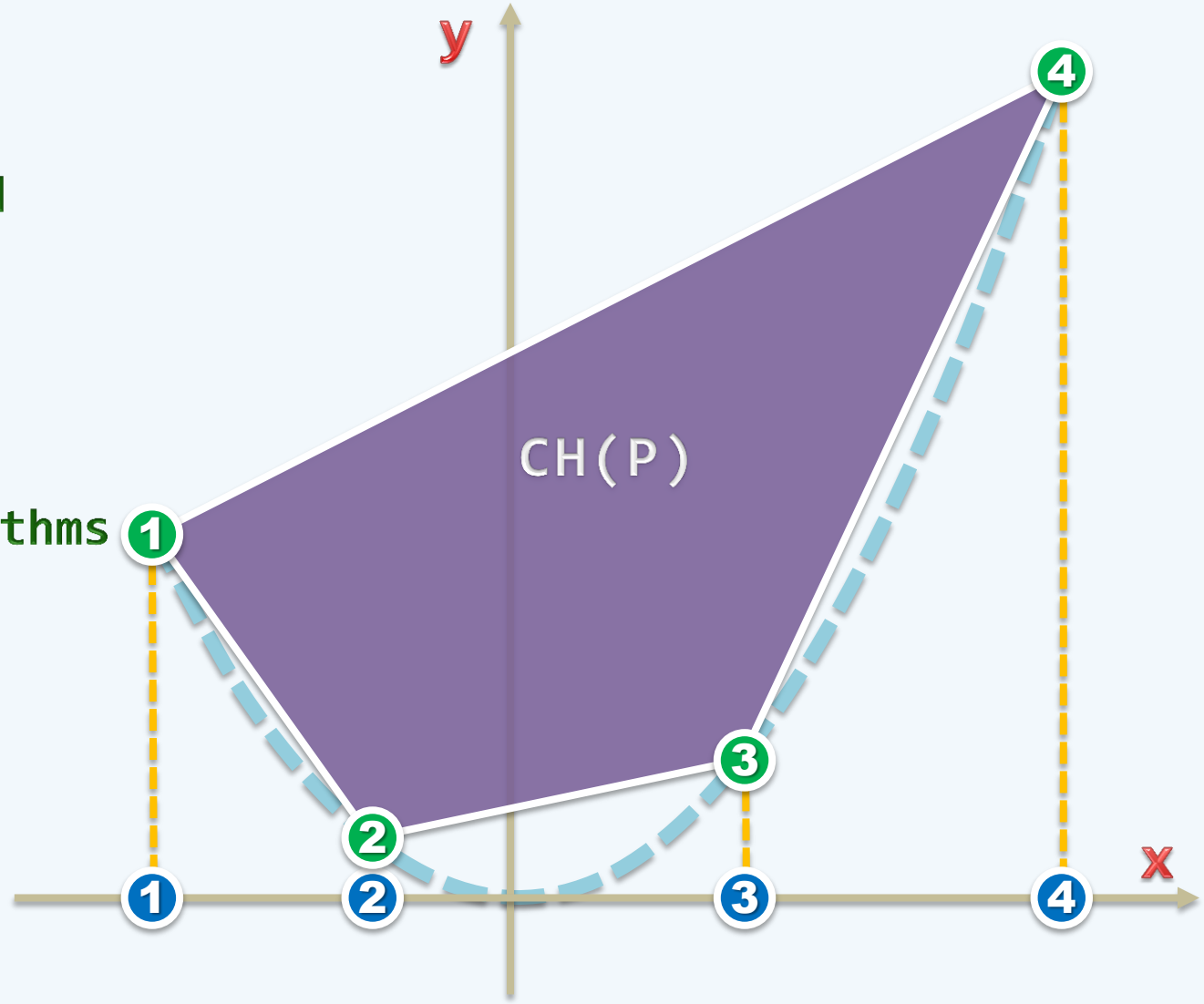
  comparison-based algorithms

- Therefore,

  $\Omega(n\log n)$ is also

  a lower bound

  for 2d-CH



Tightness?

- Is this bound **tight**?

  Or, in other words ...

- Is there a CBA

  constructing CH

  in $O(n \log n)$ time even

  in the worst cases?