

Convex Hull

Graham Scan: Analysis

- $\Omega(n)$ Backtracks

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Worst Cases?

- ❖ determining LTL $O(n)$
presorting $O(n \log n)$
scan $O(?)$
- ❖ Note that
it's possible for a point to be
involved with $\Omega(n)$ toLeft() tests
- ❖ Therefore we have:
 $O(n) \times O(n) = O(n^2)$
- ❖ However, a tighter analysis will give
 $O(n)$

