

Convex Hull

Graham Scan: Correctness

- Presorting

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習 = Practice

- ❖ The $O(n \log n)$ complexity is **dominated** by pre-sorting
- ❖ If this procedure is **skipped**
 - it's possible for Stack S to **underflow** (convince yourself)
 - otherwise, the scan runs in only **$O(n)$ time**, and
 - when the scan returns, every point in stack S define a **left turn**
- ❖ Even though, does stack S always give a **convex hull**?

