## RSK insertion

To insert $x$ into a row:

- If $x$ is weakly greater than all entries in the row, add $x$ to the end of the row.
- Otherwise, let $y$ be the smallest entry in the row such that $y>x$. Replace $y$ with $x$, and insert $y$ into the next row.


## Hecke insertion

To insert $x$ into a row:

- If $x$ is weakly greater than all entries in the row
- If adding $x$ to the end of the row results in an increasing tableau, do it.
- If not, the row is unchanged.
- Otherwise, let $y$ be the smallest entry in the row such that $y>x$.
- If replacing $y$ with $x$ results in an increasing tableau, do it. Insert $y$ into the next row.
- If not, do not replace $y$ with $x$. Insert $y$ into the next row.


## Sagan-Worley insertion

To insert $x$ into a tableau:

- Insert $x$ into the first row as in RSK. Bump out the smallest $y>x$ if such a $y$ exists.
- If $y$ is not on the main diagonal, insert $y$ into the next row.
- If $y$ is on the main diagonal, insert $y$ into the next column to the right and continue column insertion.

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