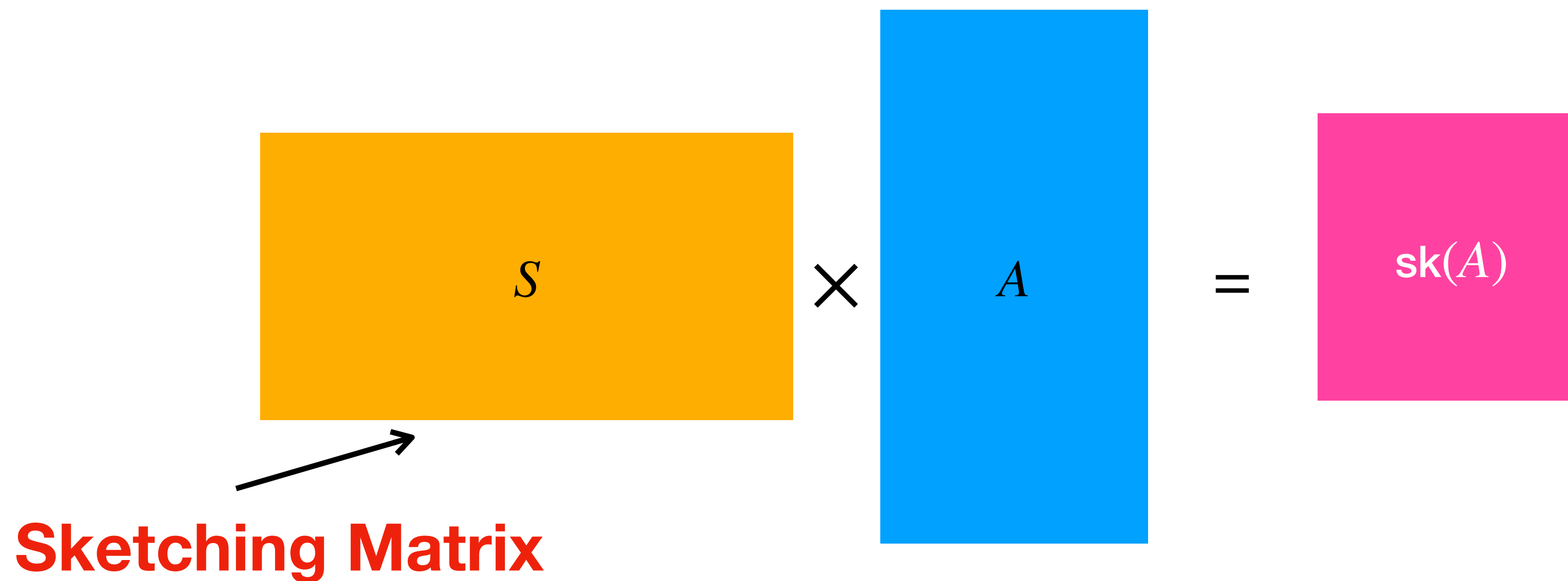


Linear Sketching

- Apply a randomized linear transform
 - CountSketch [Clarkson, Woodruff '13], OSNAP [Nelson, Nguyen '13], SRHT [Tropp '10], ...



- A good sketching matrix S consolidates information into “smaller factor”

Coresets

- A weighted subset of points
- A good solution for the subset \Rightarrow A good solution for the overall dataset
- Usually are randomized and constructed via importance sampling
 - Sensitivity Sampling [Feldman, Langberg '12]
 - Lewis Weight Sampling [Cohen, Peng '15]