

$$\text{std}(A\hat{x})$$

1) calc  $A\hat{x}$  from last row

2) calc  $\text{avg}(A\hat{x})$  from  $A\hat{x}$

3) calculate  $\sqrt{\frac{\|A\hat{x} - \text{avg}(A\hat{x})\|^2}{m}}$

$$\text{std}(b - A\hat{x})$$

1) calc  $b - A\hat{x}$  third part (a)

$$\text{calc } \text{avg}(b - A\hat{x}) = \text{avg}(b) - \text{avg}(A\hat{x}) = 0$$

$$\text{calc } \sqrt{\frac{\|b - A\hat{x} - 0\|^2}{m}}$$