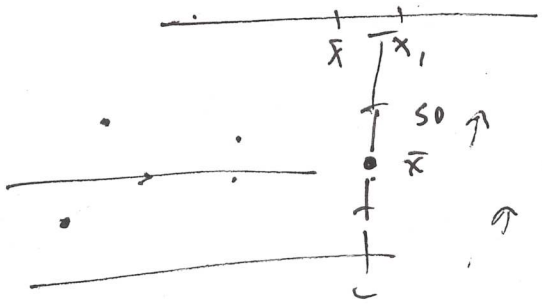
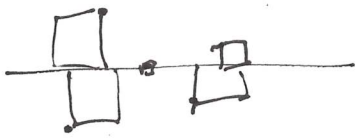
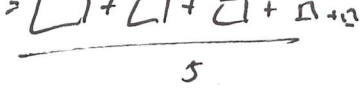
Variance and SD $\quad \sigma = \sqrt{\frac{1}{n-1}\sum (x_i - \bar{x})^2} \qquad \sigma^2 = \frac{1}{n}\sum (x_i - \bar{x})^2$

- Average squared distance from mean.



Its increase so does this bar.



$\sigma^2 =$  $/ 5$

$=$ 

$\Rightarrow \sigma = \sqrt{\square} =$ — length.

This gives me a sense of how much spread there is about the center.

However, it is also going to be very useful as a metric → in predict.

↗ — is there anything else I can use besides $\bar{x}$?

↘ — If I use "blah", how much uncertainty is left?

- Will be useful in determining association.

- Based on how much spread I see, is "blah" considered "far away"

- Am I using the wrong center?

Possibly show histogram of large and small standard deviations w/ same mean to see what we are talking about.