AMS7
Disc. 2
6/23/16

	# pups
Litter 1	2
2	6
3	5
⋮	
10	2

n=10

$\bar{y} = \frac{1}{n} \sum_{i=1}^{10} y_i$

$\frac{\text{sum}}{n} = \frac{\#}{10}$

if we want know proportion of litters 6+ pups

6+ pups
0
1
0
1

y_i = if litter > 6

$\frac{\text{sum}}{n}$

Standard Deviation: distribution of data around mean

$S^2 = \frac{1}{n-1} \sum_{i=1}^{n} (y_i - \bar{y})^2$ $\quad \bar{Y} = \frac{1}{n} \sum_{i=1}^{n} y$

$= \frac{1}{n-1} \sum_{i=1}^{n} (y_i - \frac{1}{n} \sum_{i=1}^{n} y_i)^2$

$S = \sqrt{\frac{1}{n-3} \sum_{i=1}^{n} (y_i - \bar{y})^2}$

if multiply data points by a #, mean will be ·#
add #, mean will be +#

affects mean, not standard deviation

We have (n-1) degrees of freedom for a spread with n. [✓ ✓ ✗] n=3