

13-1)

a) varies

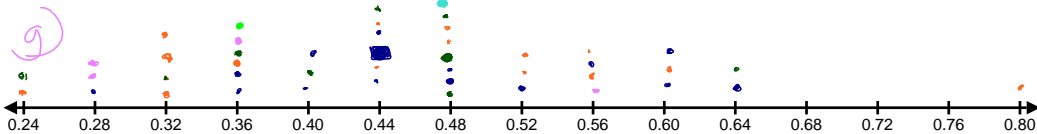
b) stat  $\hat{p}$

c) param  $p$

d)

e)

f)



sample proportion of orange candies

h) o.u.  $\rightarrow$  R.P. candy  
variable  $\rightarrow$  color

i) shape: mound-shaped  
center:  $\approx .48$   
spread: .24 to .8

j) unbiased  $\rightarrow$  center @ parameter  
<sub>stats.</sub>  
 $\approx .48$

k)

l)  $n = 10$   
same shape/center  
~~&~~ more spread/less accurate

m)  $n = .75$   
same shape/center  
~~&~~ less spread/more accurate

$$13-2 \quad p = .45$$

a)  $\hat{p} = .48$

b) (Sampling variability)

c/d) shape: approx-normal  
center: mean of  $\hat{p} = .449 = \mu_{\hat{p}}$   
Spread: St. dev. of  $\hat{p} = .093 = \sigma_{\hat{p}}$

Sampling distribution:

- graph of all possible  $\hat{p}$  of size  $n$   
from a given population.