

# THE CENTRAL LIMIT THEOREM (CLT)

$D =$  Uniform Standard Die Distribution

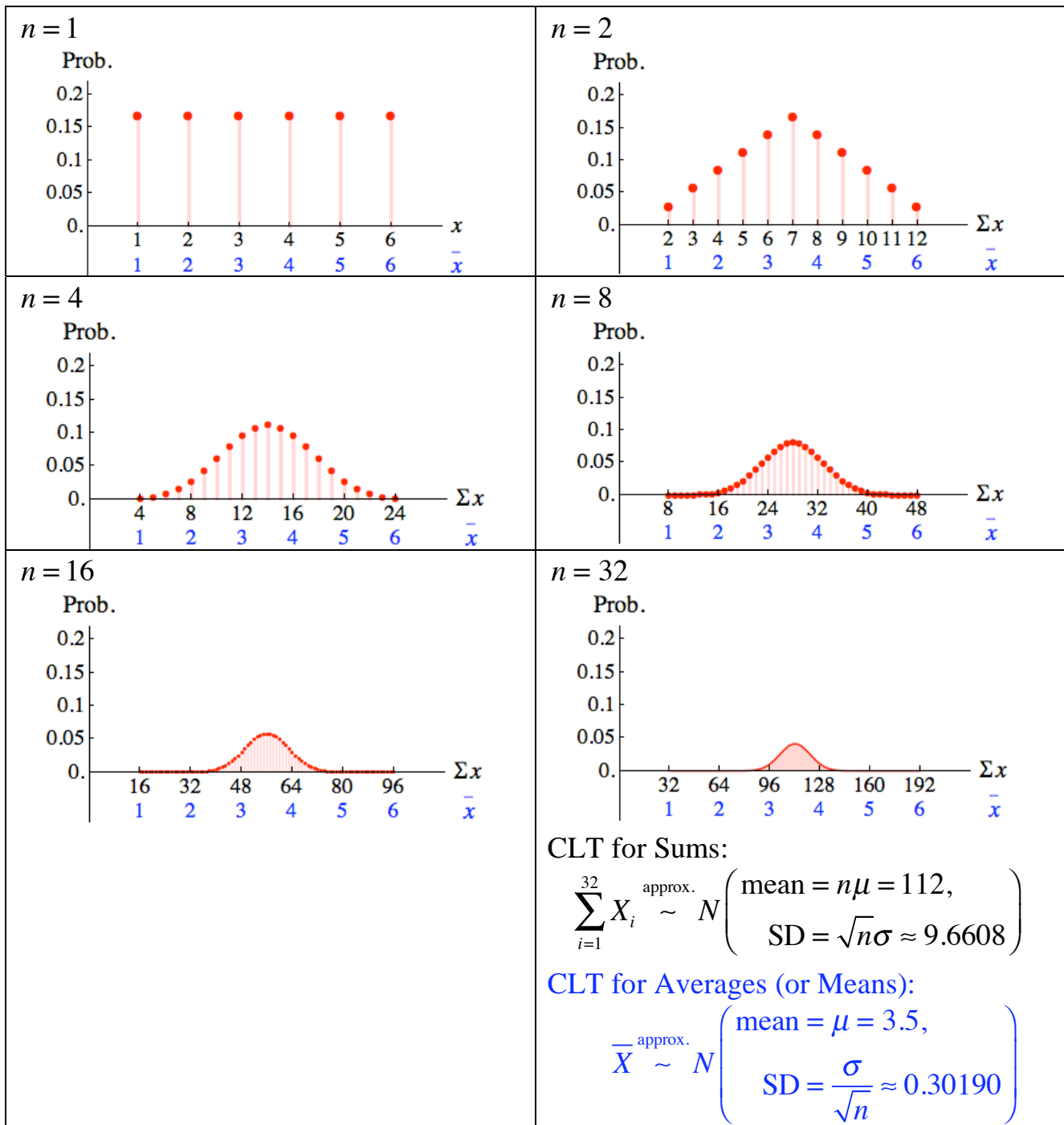
$x$	$P(x)$
1	$1/6 \approx 0.16667$
2	$1/6 \approx 0.16667$
3	$1/6 \approx 0.16667$
4	$1/6 \approx 0.16667$
5	$1/6 \approx 0.16667$
6	$1/6 \approx 0.16667$

Using methods from the previous chapter, we find:

$$\mu = 3.5$$

$$\sigma \approx 1.7078$$

In the figures below,  $n$  dice are to be rolled.



$D = \text{Biased Die Distribution}$

$x$	$P(x)$
1	$1/2 = 0.5$
2	$1/3 \approx 0.33333$
3	$1/6 \approx 0.16667$

Using methods from the previous chapter, we find:

$$\mu \approx 1.6667$$

$$\sigma \approx 0.74536$$

In the figures below,  $n$  dice are to be rolled.

