

$\text{binompdf}(n, p, x)$
 ↑ ↑ ↑
 # of trials # of prob of success # of successes looking for
 $\text{binomcdf}(n, p, x)$
 ↑
 x or less successes.

$\text{poissonpdf}(\mu, x)$
 ↑ ↑
 mean # of successes looking for
 $\text{poissoncdf}(\mu, x)$
 ↑
 x or less

X	$P(x)$
0	—
1	—
2	—
3	—
4	—

$\sum x \cdot P(x)$
 Varstats L_1, L_2
 \bar{X} = mean
 σX = SD

permutation: order matters
 1,2,3 is different from 3,2,1
 Combination: order does not matter
 1,2,3 and 3,2,1 count as 1.

Chapter 5
 19.) $4.7 \frac{\text{calls}}{\text{hr}} \cdot \frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{10 \text{ min}}{1} =$
 $= .78\bar{3} \frac{\text{calls}}{10 \text{ min}} \quad \text{STO} \rightarrow M$
 2,3,4,5...
 $1 - \text{poisson}(M, 1)$
 20.) $37.2 \frac{\text{homicides}}{\text{year}} \cdot \frac{1 \text{ year}}{365 \text{ day}} = .102 \frac{\text{homicides}}{\text{day}}$