Professor Notes About "Probability Introduction" Homework

- Probabilities are never expressed as percentages; they are always expressed as proportions.

- To save space, I did not show graphics for the probability calculations.

Food Choice by Chipmunks

1. The probability that a chipmunk eats an acorn is 0.47 ($= \frac{8}{17}$).
2. The probability that a chipmunk eats a kernel of corns is 0.53. ($= \frac{9}{17}$)
3. The probability that a chipmunk eats a kernel of corn assuming that it has already eaten six kernels of corn and no acorns is 0.27 ($= \frac{3}{11}$).

Water Usage

1. The probability that less than 60 gallons is used in this household on a random day is 0.07.
2. The probability that between 75 and 150 gallons is used in this household on a random day is 0.77.
3. The probability that less than 100 gallons is used in this household on a random day is 0.31.

R Appendix.

```
distrib(60,mean=90,sd=20)
ab <- distrib(150,mean=90,sd=20)
a <- distrib(75,mean=90,sd=20)
ab-a
distrib(100,mean=90,sd=20,lower.tail=FALSE)
```