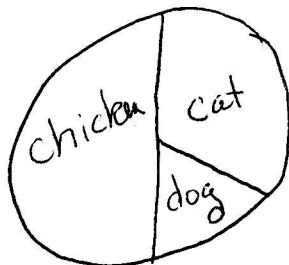


6. [8 pts] Draw and label a single spinner that simultaneously satisfies all of the following conditions:

- The probability of landing on cat, dog, cow, pig, or chicken is 1.
- 3 • The probability of landing on an animal that does not lay eggs is $1/2$.
- The probability of landing on cat is twice that of landing on dog.
- 2 • At least one animal has a probability of 0.



7. An experiment consists of tossing a coin and then spinning one wheel equally marked 1, 2, 3, and then another wheel equally marked 2, 5.

(a) [8 pts] List the members of a uniform sample space for this experiment.

$-(H, 1, 2)$ $-(H, 3, 2)$ $-(T, 1, 2)$ $-(T, 3, 2)$
 $(H, 1, 5)$ $(H, 3, 5)$ $(T, 1, 5)$ $(T, 3, 5)$
 $(H, 2, 2)$ $(T, 2, 2)$
 $-(H, 2, 5)$ $-(T, 2, 5)$

(b) [3 pts] What is the probability that you got heads and exactly 1 odd number?

$$\frac{3}{12}$$

(c) [3 pts] What is the probability that you got heads or exactly 1 odd number?

$$\frac{9}{12}$$

(d) [3 pts] What is the probability that you got heads given that you got exactly 1 odd number?

$$\frac{3}{6}$$

(e) [3 pts] What is the probability that the number on the first wheel is at least as large as that on the second wheel?

$$\frac{4}{12}$$