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.
- The probability of landing on an animal that does not lay eggs is $\frac{1}{2}$.
- The probability of landing on cat is twice that of landing on dog.

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.

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

(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?

\[ \frac{4}{12} \]