Stat 1350, Quiz #9, Spring 2015   Name _____KEY_____
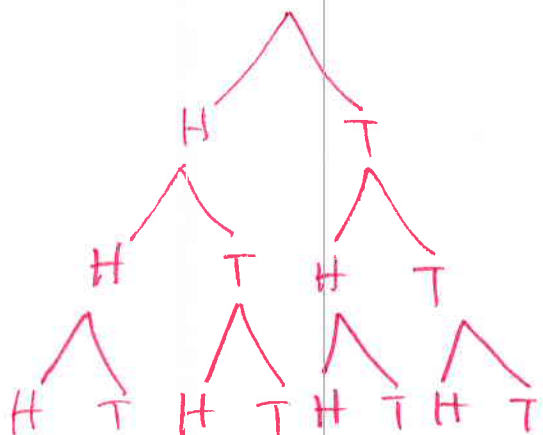
Instructions: Answer each question completely. Show all work for any computational questions.

1. How many ways are there to toss a fair coin three times? Draw a tree diagram to find all the ways. What is the probability that if you toss a fair coin three times you will get just one head?

8 total
HHH, HHT, HTH, HTT,
THH, THT, TTH, TTT

$\frac{3}{8}$

2. What is the difference between a personal probability and an experimental one?

a personal one is based on one's opinion of one's chances; an experimental one comes after repeated attempts at the same event under the same circumstances

3. What probability does something have if it is impossible?

0

4. What is the missing value in the probability distribution shown in the table below?

Outcome	1	3	5	7	9
Probability	0.12	0.43	0.25	0.14	?

.06

$1 - .12 - .43 - .25 - .14 = .06$