Math 310 - Dr. Miller - Activity #17: Basic Probability for Multi-stage Experiments

An experiment consists of spinning a wheel marked 3, 4, and 5 in equal sections, and tossing an ordinary die.

1. Create a uniform sample space for this experiment, with plenty of room for extra marking next to each outcome. How many outcomes will you list?

2. Underline the outcomes for which the sum of the two numbers is at most 6; what is the probability of this event?

3. Circle the outcomes for which the sum of the two numbers is at least 6; what is the probability of this event?

4. Dot the outcomes for which the sum is 5 or a 2 came up on the die; what is the probability of this event?

5. Triangle the outcomes for which the number on the wheel is no less than that on the die; what is the probability of this event?

6. What is the probability that the number on the wheel is larger than that on the die and that both are even?