## Quiz on 7.2: Probability

1. In an experiment, a six-sided die is rolled once. What is the probability of the event "the number rolled is less than 5 and also greater than or equal to 2"?

2. The sample space associated to the experiment of flipping a coin three times and recording the sequence of results is:

## { HHH, HHT, HTH, HTT, THH, THT, TTH, TTT }

What is the probability of the event "more heads than tails"? Circle the sample points in the event and write down the ratio of the size of the event to the size of the sample space.

3. The sample space associated to the experiment of flipping three indistinguishable coins and recording how many heads you get is:

 $\{0 \text{ heads}, 1 \text{ heads}, 2 \text{ heads}, 3 \text{ heads}\}$ 

Is it reasonable to say the probability of the event "all or no heads" is equal to the probability of the event "1 or 2 heads"? Circle the two events, and write down the ratios of event sizes to sample space size.