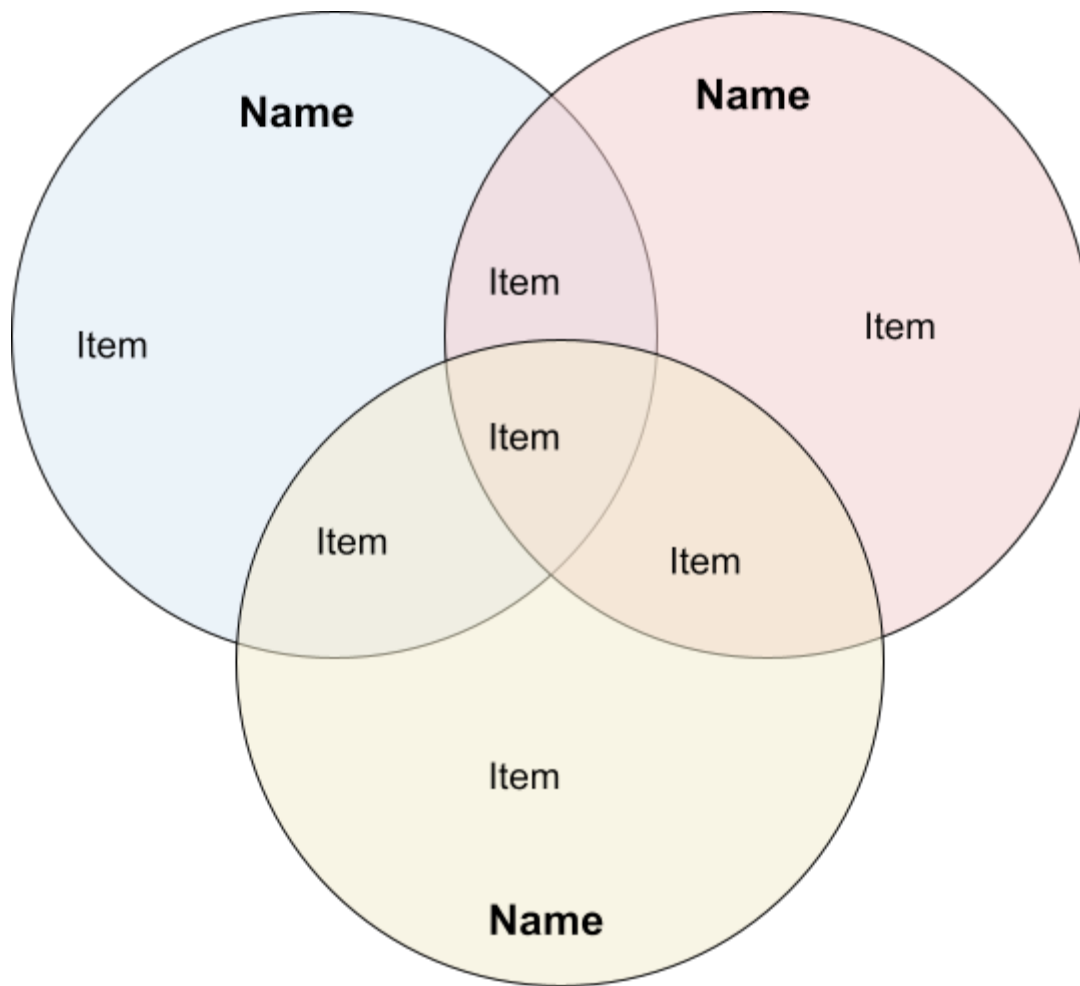
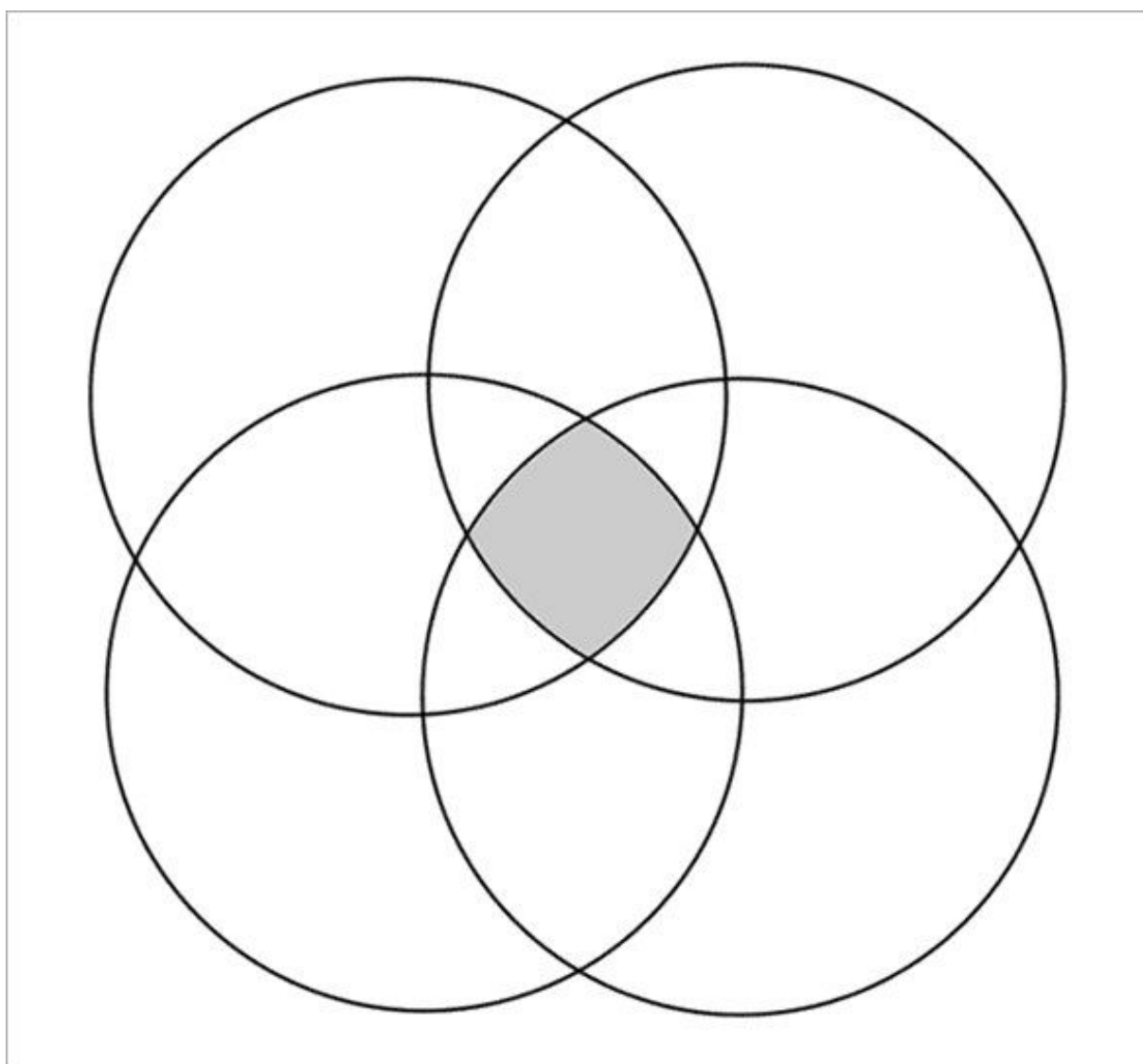


Venn Diagram Warmup:

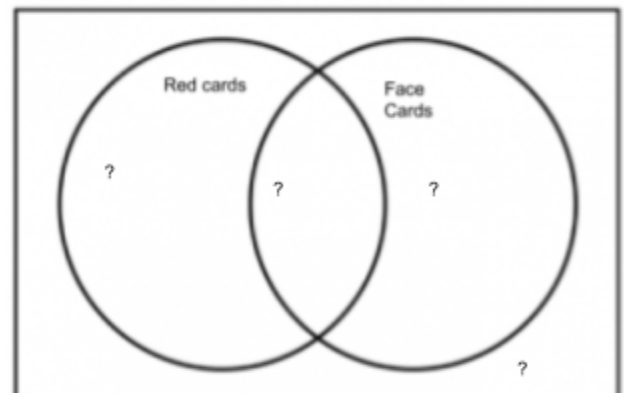




Name: _____	Simple Probability
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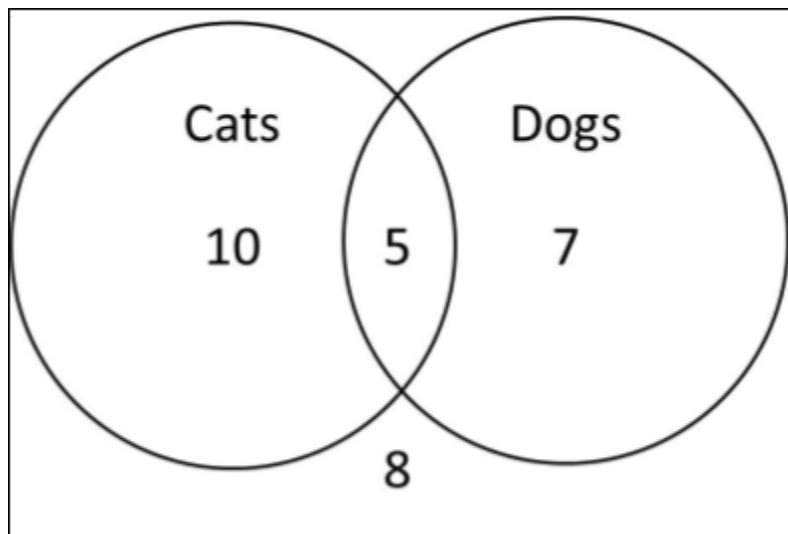
For a recent year, 51% of the families in the United States had no children under the age of 18; 20% had one child; 19% had two children; 7% had three children; and 3% had four or more children. If a family is selected at random, find the probability that the family has - Two or three children - More than one child - Less than three children - Based on the answers to parts <i>a</i>, <i>b</i>, and <i>c</i>, which is most likely to occur? Explain why. Source: U.S. Census Bureau.	
A roulette wheel has 38 spaces numbered 1 through 36, 0, and 00. Find the probability of getting these results. - An odd number (Do not count 0 or 00.) - A number greater than 27 - A number that contains the digit 0 - Based on the answers to parts <i>a</i>, <i>b</i>, and <i>c</i>, which is most likely to occur? Explain why.	
A recent study of 300 patients found that of 100 alcoholic patients, 87 had elevated cholesterol levels, and of 200 nonalcoholic patients, 43 had elevated cholesterol levels. If a patient is selected at random, find the probability that the patient is the following. - An alcoholic with elevated cholesterol level - A nonalcoholic - A nonalcoholic with nonelevated cholesterol level	
A couple has three children. Find each probability. - All boys - All girls or all boys - Exactly two boys or two girls - At least one child of each gender	

- Fill in the venn diagram with numerical counts for each question mark
- Find the theoretical probability of getting a red card:
- Find the theoretical probability of getting a face card:
- Find the theoretical probability of getting a card that is both red and a face:
- Find the theoretical probability of getting a red or face card:



The Venn Diagram represents what animals students have at home in my classes.

1. How many students are represented in total?
2. If you picked a student at random, what is the probability they have just a cat(s) at home?
3. If they have a dog, what is the probability they also have a cat?

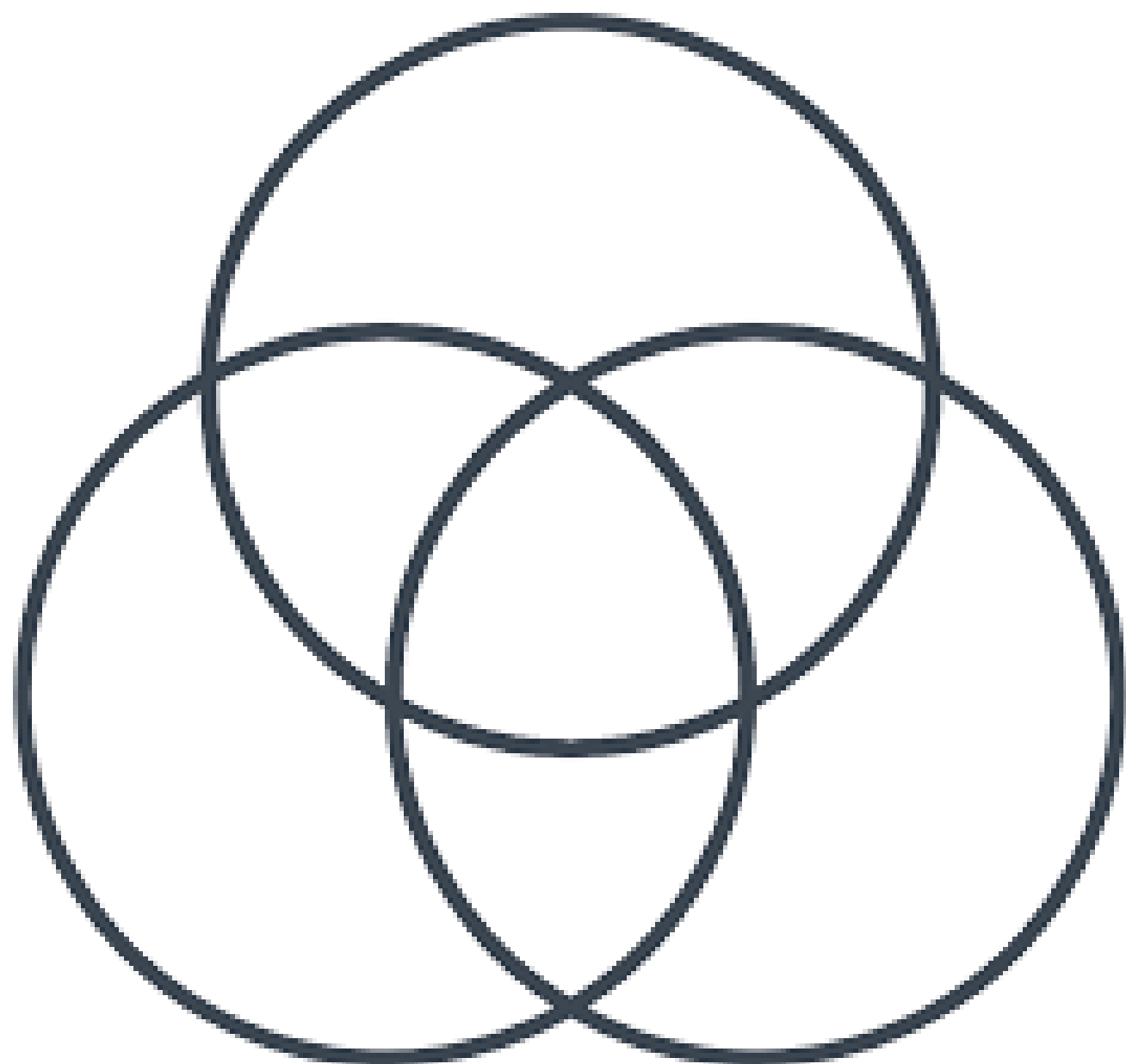


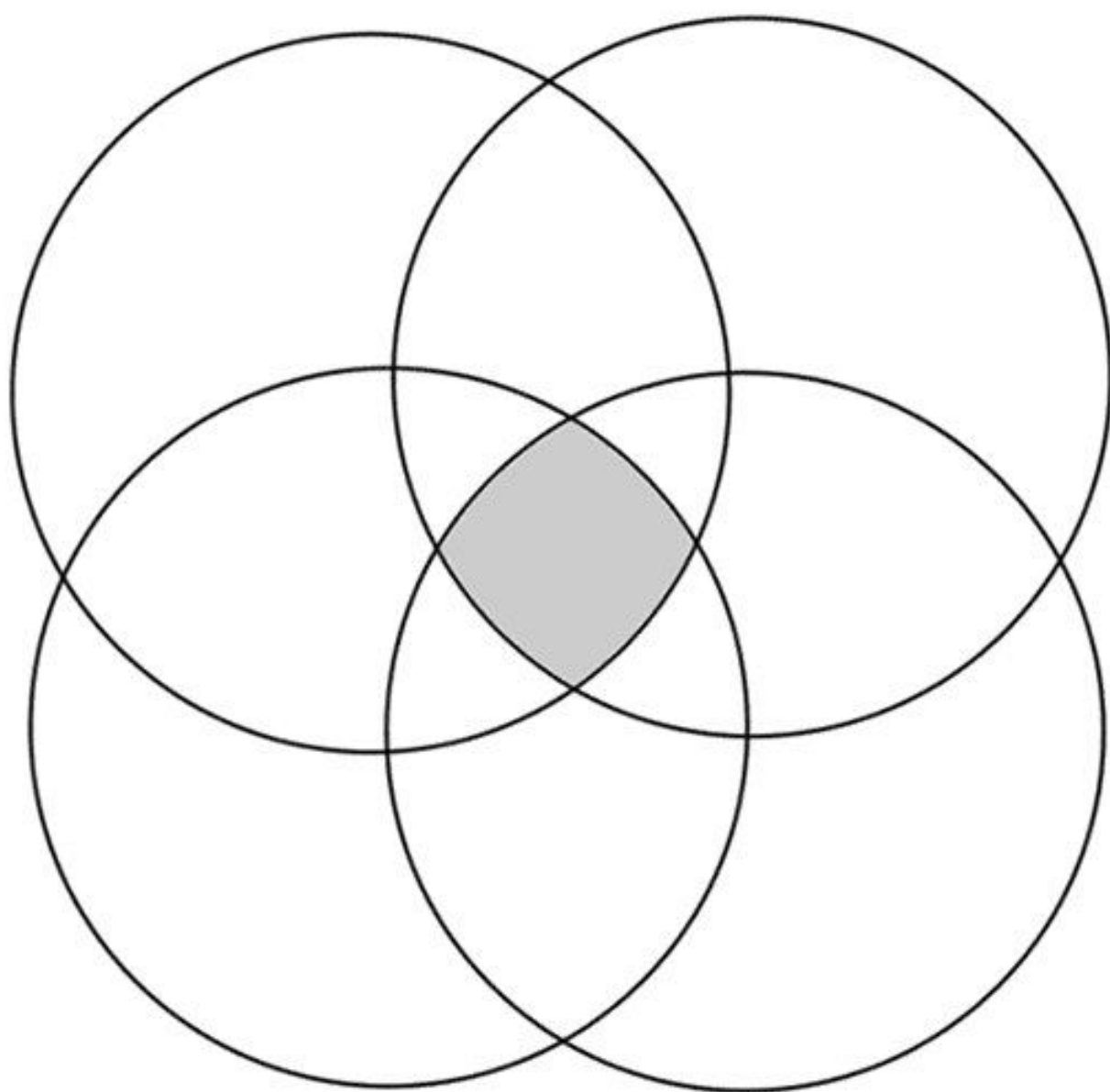
If you flip a coin 4 times, draw the sample space of all possible outcomes?



Find the probability that you will get exactly 4 heads?

Find the probability that you will get at least 3 heads?





Exceeds:

In tennis, you are allowed 2 attempts at serves. The serve is either In or Out. They either win the point or not. Draw a tree diagram that shows all the possible outcomes (for serve and winning) for someone who serves.

Find chance you win point, if: your opening serve goes in 65% of the time and when it does, you win 62% of the time. If it doesn't go in, your second serve goes in 89% and if it goes in, you have a 41% chance of winning.

If you win the point, what is the chance you won on your first serve.