Probability Definitions and Concepts

- 1. When dealing with independent events, what are the mathematical operation equivalents to the words "and" and "or"?
- 2. When we know the probabilities of all events in a sample space, what is the sum of all those probabilities?

Draw three Venn diagram of two events, A and B, then shade in:

- 3. P(A)
- 4. P(A∩B)
- 5. P(not A)

6. In a deck of 52 cards, what is the probability of picking the 2 of diamonds of the top of a well shuffled deck?

- 7. With a 6-sided die, what is the probability of rolling:
 - a. An even number
 - b. A 2
 - c. An odd number
 - d. A number greater than 4
 - e. A prime number

8. Same as #7, but with a 20-sided die.

9. Define the compliment of an event. Then, determine the compliment of P(A) = .78.

10. If I flip a coin three times, what is the probability of getting three heads? Three tails?