1. Get a deck of cards. Take out the King, Queen, Jack and Ace of hearts. Place these cards face down on your table. Shuffle the cards around.

    (a) If you were to pick one card, what are the chances of picking the King of hearts? definite _____ likely _____ unlikely _____

    (b) If you were to pick one card, what are the chances of picking the Queen of hearts? impossible _____ possible _____ not sure _____

    (c) If you were to pick one card, what are the chances of picking the Jack of spades? possible _____ likely _____ no chance _____

2. Get a deck of cards. Take out the King, Queen, Jack, Ace, 10 and 2 of hearts. Place them face down on the table. If you were to pick and return a card from the ones on the table and shuffle the cards after each pick, would the following statements be true or false?

    (a) It is possible that I would pick the Queen of hearts as my first card.

    _____

    (b) It is likely that I would not pick the 10 of hearts in my first 6 picks.

    _____

    (c) I would never pick the 5 of hearts. _____

    (d) It is impossible that I would pick the King of hearts twice in a row.

    _____

    (e) If I picked 10 cards one after the other, I definitely would pick the Ace of hearts. _____

    (f) If I picked 4 cards, it is unlikely that I would pick the Jack of hearts twice.

    _____

    (g) If I picked 4 cards, it is impossible that I would pick them in this order: King, Queen, Ace and Jack. _____

    (h) If I picked 10 cards, it is unlikely that I would pick the 2 of hearts more than once. _____

    (i) It is possible that I would pick each of the cards on the table if I picked 10 cards. _____

    (j) Each of the cards on the table has an equal chance of being picked each time I pick a card. _____

3. Rewrite each of the statements in Question 2 so that they would require the opposite answer. All of the questions that were true in Question 2 will be false in Question 3. Often you will need to change only a word or two to achieve this.