

Lesson 15 Practice Problems

- 1. Noah is planning his birthday party. Here is a tree showing all of the possible themes, locations, and days of the week that Noah is considering.
 - a. How many themes is Noah considering?
 - b. How many locations is Noah considering?
 - c. How many days of the week is Noah considering?
 - d. One possibility that Noah is considering is a party with a space theme at the skating rink on Sunday. Write two other possible parties Noah is considering.



- e. How many different possible outcomes are in the sample space?
- 2. For each event, write the sample space and tell how many outcomes there are.
 - a. Lin selects one type of lettuce and one dressing to make a salad.

Lettuce types: iceberg, romaine Dressings: ranch, Italian, French

b. Diego chooses rock, paper, or scissors, and Jada chooses rock, paper, or scissors.



3. A simulation is done to represent kicking 5 field goals in a single game with a 72% probability of making each one. A 1 represents making the kick and a 0 represents missing the kick.

trial	result
1	10101
2	11010
3	00011
4	11111
5	10011

Based on these results, estimate the probability that 3 or more kicks are made.

This problem is from an earlier lesson

- 4. There is a bag of 50 marbles.
 - Andre takes out a marble, records its color, and puts it back in. In 4 trials, he gets a green marble 1 time.
 - Jada takes out a marble, records its color, and puts it back in. In 12 trials, she gets a green marble 5 times.
 - Noah takes out a marble, records its color, and puts it back in. In 9 trials, he gets a green marble 3 times.

Estimate the probability of getting a green marble from this bag. Explain your reasoning.

(From Unit 8, Lesson 14.)