

Week 4 Wednesday

Comfort Food

Turn to someone sitting next to you. Make sure you know each other's names, and then take about 2 minutes to discuss:

Do you have a go-to comfort food? If so, what is it? If not, do you have some other go-to comfort activity?

Frequency Analysis, Probability Basics

1. A nickel, a dime, and a quarter are flipped simultaneously.

Which of the following events is most likely?

- (A) The nickel lands heads.
- (B) Exactly one of the three coins lands heads.
- (C) Exactly two of the three coins lands heads.
- (D) At least one of the three coins lands heads.

2. Two fair six-sided dice are rolled simultaneously: one red and one blue. Let the random variable R represent the number on the red dice and B the number on the blue dice, so that $R + B$ represents the sum of the numbers on the two dice. Which of the following is most accurate?

- (A) R and B are uniform, and so is $R + B$.
- (B) R and B are uniform, but $R + B$ is not.
- (C) R and B are not uniform, but $R + B$ is.
- (D) R and B are not uniform, and neither is $R + B$.

3. Amélie rolls a six-sided dice. If it's 3 or less, she loses \$9. If it's 5 or more, she wins \$18. Which of the following is most accurate?

- (A) Amélie is expected to lose money
- (B) Amélie is expected to break even
- (C) Amélie is expected to win money

4. There are 5 multiple choice questions on a math exam. Each question comes with 4 options for an answer, and exactly one of the four options is correct. Sunny has not studied at all and decides to guess randomly on all of the questions. Which of the following events is most likely?

- (A) Sunny gets all of the questions right.
- (B) Sunny gets at least one question right.
- (C) Sunny gets exactly one question right.
- (D) Sunny only gets the fifth question right.