In-Video Quiz Questions for

Unit 5: Part 3 – (2) Small sample proportion example

At 1:26:

1. Suppose we want to simulate this experiment using a die, where the outcome 1 will represent "success" (guessing the back of the hand correctly) and all other numbers will represent failures (guessing the back of the hand incorrectly). Which of the dice below is appropriate for simulating this experiment?

(Hint: Remember we simulate assuming the null hypothesis is true.)

(a) 6-sided die
(b) 10-sided die
(c) 11-sided die
(d) 12-sided die

At the end of the video:

2. Which of the following statements is **best supported** by this hypothesis test?

(a) There is a 0% chance that people are better at recognizing the backs of their hands than random guessing.
(b) There is a 100% chance that people are better at recognizing the backs of their hands than random guessing.
(c) There is a 0% chance of 11 or more out of 12 people recognizing the backs of their hands in this experiment if in fact they were randomly guessing.
(d) There is a 0% chance of 11 out of 12 people recognizing the backs of their hands in this experiment if in fact they were randomly guessing.

Answers:

1. b

Explanation: P(1 in a 10-sided die) = 0.10 = null value

2. c

Explanation: p-value = P(observed or more extreme outcome | null hypothesis true)