

Question 6

6.25 pts

Read the research article: "Olfactory and gustatory dysfunctions in 100 patients hospitalized for COVID-19: sex differences and recovery time in real-life."

The mean age of patients for this research study is

65

, and the standard deviation of the

patient's ages is

65 ± 15

15.

The variance of the patient's ages is

225.

PSET 1: Statistics Thinking Exercise A

Started: Oct 7 at 10:09pm

Quiz Instructions

Please try not to use software to help with this assignment (you can use a calculator to help with basic addition, subtraction, multiplication, and division calculations but don't use any statistics functions). This assignment is intended for you to perform the calculations manually by applying the statistical formulas. Use 2 decimal places for all numerical answers. Choose the best answer choice. You have three attempts, with the highest score kept.



Use this research article for the next three questions:

[Student perspectives on behaviors that constitute cheating.pdf](#) ↓



Question 1 25 pts

Read the research article: "Student perspectives on behaviors that constitute cheating."

Fill in your answer to the following items:

Who?

What?

When?

Where?

Why?

How?

Edit View Insert Format Tools Table

12pt Paragraph

Who- the individuals who were surveyed? Students
This article reports the results of a research study that replicated the student survey.

What is the sample size for this research study?

135



Question 3 6.25 pts

Read the research article: "Student perspectives on behaviors that constitute cheating."

What are the limitations of this research study? Select all limitations identified by the researchers.

☒ Only one university is included in the study

☒ Students are too young and may not know the consequence of cheating

☒ Students surveyed did not have the experience such as writing a college level term paper or taken a final exam at the institution

☒ Professors are not included in the survey

☐ No qualitative data were collected



Question 4 6.25 pts

Read the research article: "Student perspectives on behaviors that constitute cheating."

Let's say that we want to conduct a research study on the research questions used for this research study. We want to calculate the variance of the "yes" responses for all 21 survey questions

(hint: our research study is independent of the Student perspectives on behaviors that constitute cheating study)

What is the Variance of the "yes" responses for all 21 survey questions?

1853.21

patient's ages is

The variance of the patient's ages is



Question 7 6.25 pts

Read the research article: "Olfactory and gustatory dysfunctions in 100 patients hospitalized for COVID-19: sex differences and recovery time in real-life."

Which formula was used to calculate the standard deviation of the patient's ages?

a)
$$\sigma = \sqrt{\frac{\sum (x_i - \mu)^2}{N}}$$

b)
$$s = \sqrt{\frac{\sum_{i=1}^N (x_i - \bar{x})^2}{N - 1}}$$

☒ a)

☐ b)



Question 8 6.25 pts

The salary of all software engineers in Monterrey for a Monterrey software engineer salary research study.

☒ Population

☐ Sample



Question 10 6.25 pts

A list of the ice cream flavors sold on the first of June at Harvard COOP between 9 am to 10 am.

☐ Quantitative

☒ Qualitative



Question 11 6.25 pts

Why is it important to use random sampling?

☐ Mitigate risk of using a small sample size

☐ Increase standard deviation of the sample

☒ Increase the generalizability of the results



Question 12 6.25 pts

If the standard deviation of a sample is zero, this means that every value in the sample is the exact same.

You collected a sample consisting of 75 numbers, and one of the numbers is 21. The sample standard deviation turns out to be zero. What is the average of the 74 other numbers?

24



Question 13 6.25 pts

Joe's Pizza's marketing department surveyed 40 customers randomly selected from a contact database. 26 of the 40 customers surveyed placed an order of one pizza within a week. 8 of the 40 placed an order of three pizzas within a week, and 6 of the 40 did not order anything within a week.

What is the mode of the number of pizzas ordered in one order within a week?

3

Who- the individuals who were surveyed? Students

143 first-year students but only 135 provided consent for their data to be used on this research.

What? We see what is being measured?

Each item on the survey has three options to choose from, yes, no, depends with an opportunity to leave a comment.

When?

The survey was conducted in 2009 with changes in the questionnaire from a previous survey in 2002.

Where? Where was the research conducted?

Experience at a large public research university in the Midwestern region of the U.S.

Why? What is the purpose of survey?

The purpose of this study is to reflect how technology has become infused in teaching and the assessment of learning.

(in case you can't see the answer key after you take the quiz)

The other purpose of this study is to give some recommendations for preventing academic dishonesty.

Q1: The comments have been added.

Q2: 135

How? How the survey experiment was conducted?

in class as a precursor to discussion of academic integrity, instrument was a paper and asked students to circle(Y/N/D) for each question.

Q3: Only one university is included in the study & Students surveyed did not have the experience such as writing a college level term paper or taken a final exam at the institution

Q4: Between 1,764 and 1,765

Q5: 100

Q6: 65, 15, 225

Q7: b

Q8: population

Q9: sample

Q10: qualitative

Q11: Increase the generalizability of the results

Q12: 21

Q13: 1