1. Assuming that the premises are true, write the appropriate deductive conclusion for the following argument.

P1: “Some residents at this shelter are undocumented immigrants.”
P2: “Some residents at this shelter have outstanding arrest warrants.”

Therefore

C: ________________________________

Select the conclusion from the following list:

- “Everyone at this shelter with outstanding arrest warrants is an undocumented immigrant.”
- “Every undocumented immigrant at this shelter has outstanding arrest warrants.”
- “Some undocumented immigrants at this shelter have outstanding arrest warrants.”
- “No one at this shelter with outstanding arrest warrants is an undocumented immigrant.”
- “No undocumented immigrant at this shelter has outstanding arrest warrants.”
- There is no valid deductive conclusion from these premises.

2. Does the evidence presented in the following inductive argument adequately support the conclusion? Please give the reason for your decision.

“When clients participate in goal setting and treatment planning, more clients show improvement on their presenting problem than when they do not participate in setting goals and treatment plans. In a review of 100 cases randomly selected from those seen last year, clients in 53 cases actively participated in setting intervention goals and planning how to reach them. In the remaining 47 cases, the worker set the goals for the client and developed the plan for reaching them. There was no meaningful difference with respect to referral reason, problem severity, or client capabilities between the cases where clients were included in planning and the cases where clients were excluded from planning. For the clients who participated in planning, 70% completely resolved their presenting problem and 10% showed improvement although their presenting problem was not completely resolved. Cases were open an average of 92 days. For the clients who did not participate in planning, 49% completely resolved their presenting problem and 6% showed improvement although their presenting problem was not completely resolved. Cases were open an average of 93 days.”
3.01. There is one error in the statement of the following hypothesis. What is it?
Parents who were abused as children will abuse their children more frequently than parents who were not abused as children.

3.02. Write a substitute hypothesis in correct form (with no errors) about the same research question.

4. Identify the level of measurement:
Client age categories.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 – 17</td>
<td>2</td>
</tr>
<tr>
<td>13 – 15</td>
<td>11</td>
</tr>
<tr>
<td>9 – 12</td>
<td>7</td>
</tr>
<tr>
<td>5 – 8</td>
<td>4</td>
</tr>
<tr>
<td>2 – 4</td>
<td>3</td>
</tr>
<tr>
<td>0 – 1</td>
<td>0</td>
</tr>
</tbody>
</table>

5. Identify the level of measurement:
Total score on the Generalized Contentment Scale (the sum of the transformed item scores equals the total Generalized Contentment Scale score)

6. Identify the level of measurement:
Difference in rate per 10,000 of identified autistic disorder for kindergarten-aged children between two adjacent school districts for each year over a ten-year period.

7. Identify the level of measurement:
Difference between number of absent days and average number of absent days for a sample of students over the most recent six week period.

8. We wish to evaluate support for requiring parental notification before providing abortion services to a minor among registered voters in a neighborhood.
We have a sampling frame containing the names of the \( N = 862 \) registered voters in the neighborhood.
We wish to draw a sample of \( n = 30 \) individuals.
We assigned unique identification numbers from 1 to 862 to each of the individuals.
Then we took a table of random digits (e.g., Table A5.19 in Appendix V) and looked at the last three digits of the random digits in the table. If the last three digits were greater than 862, we ignored those particular random digits.
We used the remaining random digits to identify a set of \( n = 30 \) identification numbers. We selected the individuals whose identification numbers matched the \( n = 30 \) identification numbers for inclusion in the sample.
After selecting the sample, we asked each of the \( n = 30 \) individuals in the sample to fill out a twelve item questionnaire covering situations where a minor might seek abortion. For each of the situations, the questionnaire asked the individual to indicate whether or not the parents should be notified before abortion services were provided.
Using this procedure, we selected a(n)
- cluster sample
- convenience sample
- purposive sample
- quota sample
- simple random sample
- snowball sample
- stratified sample
- systematic sample
9. The distribution in Table 8.25 has the following characteristics:

- $Y_{25}$ or $Q_1 = 7.54$
- $Y_{5}$ or $Q_2 = 13.7$
- $Y_{75}$ or $Q_3 = 22.25$

![Table 8.25](image)

9.01. What is the value for the interquartile range? $\text{IQR} = \underline{\phantom{0.00}}$
9.02. What is the value for the semi-interquartile range? $\text{SIQR} = \underline{\phantom{0.00}}$

Please show your work and round your answers to two decimal places.

10. This set of $n = 64$ scores has a mean of $\bar{Y} = 4$ and a sum of squares of $SS_Y = 96$.

- $\{Y|Y = 1, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 6, 6, 6, 6, 6, 7\}$

10.01. What is the value for the population variance. $\sigma^2_Y = \underline{\phantom{0.00}}$.
10.02. What is the value for the population standard deviation, $\sigma_Y = \underline{\phantom{0.00}}$.

Please show your work and round your answers to two decimal places.

11. We randomly selected $n = 20$ individuals from those individuals who received suspended sentences and one-year probation for first misdemeanor offenses five years ago.

Over the next five years, members of this sample had an average of 4.4 additional arrests.

Table 8.23 shows the actual number of subsequent arrests for each of these 20 individuals.

![Table 8.23: Subsequent Arrests](image)

11.01. Is average number of subsequent arrests a good indicator of the typical number of subsequent arrests?
11.02. Why or why not?
12. Find the requested proportions for the following $z$ scores using Table A5.01: Proportions of the Standard Normal Distribution in Appendix V.

   Please show all work on a separate sheet and list your answers on your answer sheet.

   Do not round your answers.

   12.01. The proportion of scores between $z = 1.65$ and the mean. \( p = \) ________.

   12.02. The proportion of scores greater than $z = 1.65$. \( p = \) ________.

   12.03. The proportion of scores less than $z = 1.65$. \( p = \) ________.

   12.04. The proportion of scores between $z = -1.65$ and $z = +1.65$. \( p = \) ________.

   12.05. The proportion of scores that are less than $z = -1.65$ or greater than $z = +1.65$. \( p = \) ________.

13. We wish to evaluate the relative effectiveness of two reading skills programs.

   We randomly selected a sample of $n = 60$ students from the second grade students referred for help with reading skill deficiencies from the ten elementary schools in our school district. We conducted the sampling with the restriction that we would randomly select six students from each of the ten elementary schools.

   We randomly assigned half of the students selected from each elementary school to participate in a program where, in addition to working with a reading resource teacher for 30 minutes each day, they worked with a middle school student mentor for 50 minutes on Mondays, Wednesdays, and Fridays.

   We assigned the remaining students to the standard program in our district (working with a reading resource teacher for 60 minutes each day).

   After twelve weeks of program participation, we evaluated reading skill for each of the students using a well-validated and fictional reading skills test (the Osceola Test of Reading Skills). The score on the Osceola Test of Reading Skills consists of number of correct answers.

   13.01. The independent variable in this study refers to which of the following.
   - (1) elementary schools, (2) middle schools
   - Osceola Test of Reading Skills score
   - program assignment status
   - (1) reading resource teacher, (2) reading resource teacher and student mentor
   - reading skill
   - referral status
   - (1) referred for reading skill deficiencies, (2) not referred for reading skill deficiencies
   - schools compared
   - second graders

   13.02. Levels of the independent variable in this study refer to which of the following.
   - (1) elementary schools, (2) middle schools
   - Osceola Test of Reading Skills score
   - program assignment status
   - (1) reading resource teacher, (2) reading resource teacher and student mentor
   - reading skill
   - referral status
   - (1) referred for reading skill deficiencies, (2) not referred for reading skill deficiencies
   - schools compared
   - second graders
13.03. The dependent variable in this study refers to which of the following.

- (1) elementary schools, (2) middle schools
- Osceola Test of Reading Skills score
- program assignment status
- (1) reading resource teacher, (2) reading resource teacher and student mentor
- reading skill
- referral status
- (1) referred for reading skill deficiencies, (2) not referred for reading skill deficiencies
- schools compared
- second graders

13.04. The dependent measure in this study refers to which of the following.

- (1) elementary schools, (2) middle schools
- Osceola Test of Reading Skills score
- program assignment status
- (1) reading resource teacher, (2) reading resource teacher and student mentor
- reading skill
- referral status
- (1) referred for reading skill deficiencies, (2) not referred for reading skill deficiencies
- schools compared
- second graders

13.05. Identify the level of measurement (Nominal, Ordinal, Interval, or Ratio) for the dependent measure in this study.

14. We wished to evaluate the effectiveness of a computer-administered training program designed to teach basic interviewing skills. We randomly selected a sample of \( n = 10 \) social work students as subjects for this evaluation.

Each student participated in the training program for 30 minutes each weekday for ten days.

Before beginning the program, we videotaped each student while the student conducted a structured interview of an actor who played the part of a client with a particular concern.

After completing the program, we videotaped the ten students again while each student interviewed a second actor playing the part of a client from a slightly different background and having a slightly different concern.

We used two client background/problem scenarios (scenario A and scenario B) for the interviews. Half the students saw the actor who played scenario A for the pre-test interview and the actor playing scenario B for the post-test interview. The remainder saw the actor who played scenario B for the pre-test interview and the actor playing scenario A for the post-test interview.

A rater evaluated each videotape using the Rabin Interview Skills Protocol (RISP). The RISP is a well-validated and reliable (albeit fictitious) instrument for the evaluation of interview skills.

The RISP consists of ten items that describe ten components of skillful interviewing. A rater observes an interview and then rates the interviewer’s performance in each of the ten components of skillful interviewing. The rater uses a five point scale from 1 = inadequate use of the skill component to 5 = superior use of the skill component.

The total RISP score is the sum of the ten item scores. Possible RISP scores range from 10 to 50 where higher scores on the RISP indicate more skillful interviewing.

We gave the videotapes of individual interviews to the rater in random order. The rater did not know which interviews were pre-test interviews and which were post-test interviews.

As a check on rater reliability, we randomly selected six of the videotapes and had a second rater evaluate them with the RISP. The second rater did not know what scores the first rater had given. As was the case with the first rater, the second rater did not know which interviews were pre-test interviews and which were post-test interviews.
When we compared the scores, the results indicated strong agreement between the raters (high inter-rater reliability). On four of the videotaped interviews, the second rater gave RISP scores that were the same as the first rater’s. For one of the remaining interviews, the second rater gave a RISP score one point higher than the first rater’s score. For the other interview, the second rater gave a RISP score that was two points less than the first rater’s score.

14.01. The independent variable in this study refers to which of the following.
- actors
- (1) before training, (2) after training
- (1) client scenario A, (2) client scenario B
- (1) first actor, (2) second actor
- (1) first rater, (2) second rater
- interviewing skill
- Rabin Interview Skills Protocol score
- raters
- scenario status
- social work students
- training status

14.02. Levels of the independent variable in this study refer to which of the following.
- actors
- (1) before training, (2) after training
- (1) client scenario A, (2) client scenario B
- (1) first actor, (2) second actor
- (1) first rater, (2) second rater
- interviewing skill
- Rabin Interview Skills Protocol score
- raters
- scenario status
- social work students
- training status

14.03. The dependent variable in this study refers to which of the following.
- actors
- (1) before training, (2) after training
- (1) client scenario A, (2) client scenario B
- (1) first actor, (2) second actor
- (1) first rater, (2) second rater
- interviewing skill
- Rabin Interview Skills Protocol score
- raters
- scenario status
- social work students
- training status
14.04. The dependent measure in this study refers to which of the following.

- actors
- (1) before training, (2) after training
- (1) client scenario A, (2) client scenario B
- (1) first actor, (2) second actor
- (1) first rater, (2) second rater
- interviewing skill
- Rabin Interview Skills Protocol score
- raters
- scenario status
- social work students
- training status

14.05. Identify the level of measurement (Nominal, Ordinal, Interval, or Ratio) for the dependent measure in this study.

**Text: Rubin & Babbie**

1. The following information was found in a codebook about social work students:

<table>
<thead>
<tr>
<th>Columns</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enrollment Status</td>
</tr>
<tr>
<td></td>
<td>1 = full-time</td>
</tr>
<tr>
<td></td>
<td>2 = part-time</td>
</tr>
<tr>
<td></td>
<td>3 = other</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>1 = female</td>
</tr>
<tr>
<td></td>
<td>2 = male</td>
</tr>
<tr>
<td>5</td>
<td>Concentration</td>
</tr>
<tr>
<td></td>
<td>1 = administration/policy</td>
</tr>
<tr>
<td></td>
<td>2 = clinical practice</td>
</tr>
<tr>
<td></td>
<td>3 = community practice</td>
</tr>
</tbody>
</table>

15.01. List the variables in this code book.

15.02. What does the following line of code represent?

1 1 3

**Text: Hyde et al.**

16. Please define the following terms.

16.01. evidence-based practices (Use 20 words or less for this definition):

16.02. promising practices (Use 35 words or less for this definition):

16.03. emerging practices (Use 35 words or less for this definition):

16.04. scientific evidence (Use 60 words or less for this definition):

16.05. consensus opinion (Use 35 words or less for this definition):

17. Please define these two terms. Your definition should distinguish between their meanings.

17.01. efficacious treatment (Use 20 words or less for this definition):

17.02. effective treatment (Use 20 words or less for this definition):


Clinical treatment was evaluated based on the following criteria:

- theoretical basis (sound, novel, reasonable or unknown)
- clinical/anecdotal literature (substantial, some, limited)
- general acceptance/use in clinical practice (accepted, some, limited)
- potential for harm/risk-benefit ratio (little, some)
- level of empirical support (randomized controlled trials, pre/post, single case, none)
Based on an evaluation across these criteria, clinical treatments received ratings using this six-level scale:
(1) well-supported, efficacious treatment;
(2) supported and probably efficacious treatment;
(3) supported and acceptable treatment;
(4) promising and acceptable treatment;
(5) innovative or novel; or
(6) experimental or concerning treatment.

This report evaluated some clinical practices as carrying significant risk of causing harm to clients. Which treatment for traumatic stress was identified in Chapter 4 of Hyde et al. as having a questionable theoretical basis and creating substantial risk?