**Chapter 4: *z* Scores**

1. A population of scores has a mean of 100 and a standard deviation of 10. What raw score is represented by the z score of 0?

A. 0

B. 10

\*C. 100

Learning Objective: 4-1: Compute and interpret a *z* score for a given raw score.

Cognitive Domain: Application

Answer Location: Interpreting the *z* for a Single Score

2. If a *z* score is positive, then the raw score is \_\_\_\_\_\_\_\_\_\_\_\_.

\*A. above the mean

B. equal to the mean

C. below the mean

Learning Objective: 4-3: Explain what the sign of a *z* score indicates.

Cognitive Domain: Knowledge

Answer Location:Interpreting the *z* for a Single Score

3. Which of these *z* scores indicates a raw score that is closest to the mean of a list of scores?

A. −2.10

B. +2.35

C. +0.53

\*D. −0.24

Learning Objective: 4-1: Compute and interpret a *z* score for a given raw score.

Cognitive Domain: Knowledge

Answer Location:Interpreting the *z* for a Single Score

4. A population of scores has a mean of 100 and a standard deviation of 10. Compute the *z* score for a raw score of 112.

A. −1.20

\*B. +1.20

C. −102

D. +102

Learning Objective: 4-1: Compute and interpret a *z* score for a given raw score.

Cognitive Domain: Application

Answer Location:Computing a *z* for an Individual Score

5. A *z* score of +1.50 corresponds to a raw score that is \_\_\_\_\_\_\_\_\_\_\_\_.

A. above the standard deviation

B. a typical score

\*C. one and half standard deviations away from the mean

D. one and a half times the standard deviation

Learning Objective: 4-4: Explain what the absolute value of a *z* score indicates.

Cognitive Domain: Knowledge

Answer Location: Interpreting the *z* for a Single Score

6. Compute the raw score, *X*, if *z* = −1.75, µ = 54, and σ = 3.

\*A. 48.75

B. 55.25

C. 57

D. 59.25

Learning Objective: 4-2: Solve for *X* if given a *z* score.

Cognitive Domain: Application

Answer Location: Using *X* to Find Important “Cut Lines.”

7. What proportion of scores from a standard normal distribution are above a *z* score of +1.00.

A. 0.8413

B. 0.5398

C. 0.4604

\*D. 0.1587

Learning Objective: 4-6: Use a unit normal table to determine the proportion of scores above or below any given *z* score.

Cognitive Domain: Application

Answer Location: *z* Scores and the Standard Normal Distribution

8. What proportion of scores from a standard normal distribution are above a *z* score of −0.25.

\*A. 0.4013

B. 0.5987

C. 0.9798

D. 0.9938

Learning Objective: 4-6: Use a unit normal table to determine the proportion of scores above or below any given *z* score.

Cognitive Domain: Application

Answer Location: *z* Scores and the Standard Normal Distribution

9. What proportion of *z* scores are between −2 and +2, in a normal distribution.

A. 0.0228

B. 0.5000

\*C. 0.9544

D. 0.9772

Learning Objective: 4-6: Use a unit normal table to determine the proportion of scores above or below any given *z* score.

Cognitive Domain: Application

Answer Location: Example 3: Proportion Between Two *z* Scores

10. The absolute value of a *z* score indicates the distance between the raw score and the mean in standard deviation units.

\*True

False

Learning Objective: 4-4: Explain what the absolute value of a *z* score indicates.

Cognitive Domain: Knowledge

Answer Location: Interpreting the *z* for a Single Score