

Chapter 8 Homework

Name: _____

1. Given a distribution with a mean of -5.000 and a standard deviation of 2.500, compute the standard score equivalents of the following scores:

1a. $X = -6.730$

1b. $X = 2.950$

1c. $X = -2.500$

1d. $X = 0$

1e. $X = -6.550$

1f. $X = 0.850$

2. Given a distribution with a mean of 10.000 and a standard deviation of 3.000, compute the raw score equivalents of the following standard scores:

2a. $z = 2.250$

2b. $z = -1.000$

2c. $z = -.750$

2d. $z = 0$

3. If a person got a raw grade of 65 on a psychology test. Assuming that the raw grades will be curved based on the class' performance, which of the following class distributions would provide the most favorable interpretation of this raw grade? Why?

3a. $\bar{X} = 55; s = 10$

3b. $\bar{X} = 55; s = 5$

3c. $\bar{X} = 60; s = 2.5$

3d. $\bar{X} = 60; s = 1.5$

4. Suppose IQ scores in a population are normally distributed with $\mu = 100.00$ and $\sigma = 15.00$. What proportions of individuals have IQ scores of:

4a. 100 or higher

4b. 100 or less

4c. between 110 and 120

4d. 95 or less

4e. 95 or higher

4f. Between 90 and 110