PSYC 2317: Statistical Methods for Psychology

Tarleton State University | Unit 2 Homework

1. For a set of observations with a mean of 60 and a standard deviation of 12, find the z-score for each of the following raw scores:

$$X = 75 \quad X = 48 \quad X = 84$$
$$X = 54 \quad X = 78 \quad X = 51$$

2. For a set of observations with a mean of 25 and a standard deviation of 8, find the raw score for each of the following z-scores:

$$z = 1.00 \quad z = 0.25 \quad z = 1.50$$
$$z = -0.50 \quad z = -1.25 \quad z = -2.50$$

3. A set of observations with a mean of 76 and a standard deviation of 12 is transformed into a *standardized distribution* with a mean of 100 and standard deviation of 20. Find the new, standardized score for each of the following values from the original set of observations:

   (a) $X = 61$

   (b) $X = 70$

   (c) $X = 85$

   (d) $X = 94$