

Practice set 3 with answers

1. Match the appropriate letter with the appropriate number.

1 – measure of central tendency resistant to outliers	A median
2 – another word for variability	B percentile rank
3 – identifies where a score falls in a distribution	C uniform distribution
4 – all scores have a frequency of 1	D mode
5 – statistic that uses all scores in a distribution	E dispersion
6- most frequent score	F sufficient

answers to 1

- 1—A**
- 2—E**
- 3—B**
- 4—C**
- 5—F**
- 6—D**

2. True or false? **(answers in boldface T = true, F = false)**

- a. all normal distributions are symmetrical **T**
- b. z scores can be positive or negative **T**
- c. interquartile ranges are influenced by outliers **F**
- d. confounds threaten internal validity **T**
- e. all factorial designs are multivariate **F**
- f. parametric statistics involve nominal data **F**
- g. cumulative percentages and percentile ranks are the same **T**
- h. kurtosis describes the shape of a distribution **T**
- i. standard score distributions have a standard deviation of 0 **F**
- J. multiplying every score in a distribution by a constant of 2 doubles the standard deviation of the distribution **T**
- k. ranked data is an example of discrete data **T**

3. Answer the following questions: **(answers in bold)**

- a. If a sample distribution has a mean of 5 and $n = 5$, $\Sigma X = \mathbf{25}$
- b. If $s = 8$ and $n = 20$, then $SS = \mathbf{1216}$
- c. If my percentile rank is above 50, then my z score value must be greater than **0 and positive**
- d. Name two common biases when sampling from population: **selection bias and response bias**
- e. Dichotomous data is on which scale, nominal, ordinal, interval, or ratio? **nominal**