Math 153 - Quiz 1

Name __key__

August 30, 2018

Score _____

Show all work to receive full credit. Supply explanations when necessary. This quiz is worth 5 points. YOU MUST WORK INDIVIDUALLY.

1. (2 points) In a study of the Kingman diet and exercise program, 40 subjects lost an average of 22 lbs. There is about a 1% chance of getting such results with a program that has no effect. Are these results statistically significant, practically significant, both, or neither? Briefly explain.

22 lbs SEEMS LIKE A LOT OF WEIGHT. DIETERS WOULD BE INTERESTED. → PRACTICAL Sig.

WEIGHT LOSS UNLIKELY TO HAPPEN BY CHANCE. → STATISTICAL Sig.

BOTH !

2. (1 point) In a study of 400 babies at four different hospitals in New York State, it was found that the mean birth weight was 3152.0 grams. Is 3152.0 a statistic or parameter? Briefly explain how you know.

THE 400 BABIES ARE A SAMPLE FROM A BIGGER POPULATION.

3152.0 IS A STATISTIC.

3. (1 point) Are the data discrete or continuous?

(a) Weight gains by randomly selected students during their freshman year

CONTINUOUS

(b) Numbers of Corvettes manufactured during each production day

DISCRETE

4. (1 point) Determine the level of measurement of the following data.

(a) Voters are asked the political party with which they affiliate.

NOMINAL

(b) A baseball statistician records the years in which a National League team won the World Series.

INTERVAL