Math 153 - Quiz 1

Name _____

August 28, 2014

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (1 point) Identify the population and the sample: A survey of 202 pilots found that 20% admit that they have made serious errors due to sleepiness.

2. (1 point) The average annual salary for 35 of a company's 1200 accountants is $68,000. Is $68,000 a statistic or parameter? Explain.

3. (1 point) Sixty-two of the 97 passengers aboard the Hindenburg airship survived its explosion. Is 62 a statistic or parameter? Explain.

4. (2 points) The items below appear on a physician's intake form. Determine the level of measurement of each. Choose from *nominal*, *ordinal*, *interval*, or *ratio*.

   (a) Body temperature _____

   (b) Allergies _____

   (c) Weight _____

   (d) Pain level (scale of 0 to 10) _____

5. (2 points) Determine whether the given data value is from a discrete or continuous data set.

   (a) The Honda Civic has 4 cylinders. _____

   (b) George Washington was 188 cm tall. _____

6. (1 point) Identify the level of measurement and explain what is wrong with the calculation: In a survey of likely voters, political parties of respondents are identified as 1 for Democrat, 2 for Republican, 3 for Independent, and 4 for anything else. The average is calculated for the 850 respondents and the result is 1.7.

7. (1 point) Stephanie collected sample data by randomly selecting 12 different pages from *Harry Potter and the Sorcerer's Stone* and then finding the number of words in each sentence on each of those pages. What type is sampling was used?

8. (1 point) A sample of 50 PSC students was obtaining by randomly selecting 25 males and 25 females. Is this a simple random sample?