# IHP 525 Quiz One

1. Prospective studies on nutrition often require subjects to keep detailed daily dietary logs. In contrast, retrospective studies often rely on recall. Which method (dietary logs or retrospective recall) do you believe is more likely to achieve accurate results? Explain your response.
2. We often have a choice of whether to record a given variable on either a quantitative (continuous) or a categorical scale.
3. How does one measure age quantitatively?
4. Provide an example by which age can be measured categorically.
5. Telephone surveys may use a telephone directory to identify individuals for a study. Speculate on the type of household that would be underrepresented by using this sampling frame.
6. Could the number “0000” appear in a table of random digits? If so, how likely is this?
7. Body weights of 18 diabetics expressed as a percentage of ideal (defined as body weight divided by ideal body weight x 100) are listed: {107, 119, 99, 114, 120, 104, 88, 114, 124, 116, 101, 121, 152, 100, 125, 114, 95, 117}. Construct a stem-and-leaf plot or box plot of these data and describe the distribution.
8. Which two measures of central location are equal when data follow a perfectly normal distribution?
9. To assess the air quality in a surgical suite, the presence of colony-forming spores per cubic meter of air is measured on three successive days. The results are as follows: {12, 24, 30}. Calculate the mean and standard deviation for these data.
10. In a lottery game, a person must select 5 numbers from a total of 40. Tracy has chosen 7, 8, 9, 10, 11. Jaime has chosen 39, 17, 37, 5, 28. Who has a greater chance of winning?
11. In a box, there are 8 orange, 7 blue, and 6 red balls. One ball is selected randomly. What is the probability that it is neither orange nor red?