**Statistics # 3 – Percentiles**

In the world of kinesiology it is often convenient to express an individual’s performance relative to a group. For example, a coach might want to know how an athlete performed on a vertical jump test relative to the rest of team. A common method of determining the relative score of an individual is by converting the [raw score](http://en.wikipedia.org/wiki/Raw_score) to a [percentile](http://en.wikipedia.org/wiki/Percentile).

1. Download “Statistics # 3 Percentiles.xlsx” from my webpage and save the file as “Last Name First Name Statistics #3” e.g. “MacKenzie Sasho Statistics #3”. Remember to change the file name when saving to your computer.
2. Open the file in Excel.
3. Answer the questions below and **place your responses in the appropriate location within the “Questions and Answers” worksheet**. You may create as many additional worksheets as you like, and manipulate the raw data however you want. I will need to review these sheets to ensure you just didn’t copy the answers from another student. If I cannot determine how you arrived at your answers by reviewing your worksheets, then you will not receive credit for your answers.
4. Unless explicitly asked, you should **use the functions provided by Excel** to answer these questions (PERCENTILE and PERCENTRANK) or (PERCENTILE.INC and PERCENTRANK.INC)
5. Students are represented by student #.
6. **Questions**

1. Which student(s) is closest to the 54th percentile for height?

2. What percentile is the youngest person's wing span?

3. The person with the greatest wing span is in the \_\_\_\_ percentile for height?

4. Which female student(s) has the same percentile for both height and wing span?

5. If grouped separately with just males, what would be the percentile for the female with the largest wingspan?

6. Which student(s) has the largest difference between height and wing span percentile?

7. What is the difference between percentiles for that student(s)?

8. In what percentile, for wing span, would the average height of the entire class fall? Note: You should include the value for average height in a new grouping.

**\*ENTERED ANSWERS SHOULD BE ROUNDED TO THE NEAREST PERCENTILE AFTER ANY CALCULATIONS (e.g., 58 %, not 57.8 %)**

1. Email your Excel file to the class gmail. Type “Statistics #3” as your **Subject** and nothing else, not your name, nothing. In fact, copy and past **Statistics #3** from here into your email.