You are applying to Psychology graduate schools across the country. As you begin to apply, you check the average GRE (Graduate Record Examination) scores for graduate psychology programs across the nation. You do this because you want to try to get the best possible GRE score to help you get into graduate school. You find that there are greatly differing average scores for each of the three subscales of the GRE, as well as the mandatory GRE Psychology Subject test. NOTE: the following scores are the real average GRE scores for the 1999-2000 academic year in the United States.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>569</td>
<td>49</td>
</tr>
<tr>
<td>Quantitative</td>
<td>617</td>
<td>60</td>
</tr>
<tr>
<td>Analytical</td>
<td>672</td>
<td>195</td>
</tr>
<tr>
<td>Psychology</td>
<td>628</td>
<td>48</td>
</tr>
</tbody>
</table>

1) For each of scales above, what is the lowest score that would likely guarantee that you were admitted to graduate school? (Think the upper limit of the 95% confidence interval here).

2) Given that the GRE scales are on an 800 point scale (1 – 800), why do you think that the Analytical subscale is not generally used to pick suitable graduate students? (Note: there are 2 good reasons for this based on the data you’ve got so far).

3) For each of the above scales, what is the lowest possible GRE score that you might expect to have and still be accepted to graduate school? (Think the lower limit of the 95% confidence interval).

4) You choose a graduate school that you’re interested in attending, and you find that the school has the following average GRE scores:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>640</td>
</tr>
<tr>
<td>Quantitative</td>
<td>680</td>
</tr>
<tr>
<td>Analytical</td>
<td>660</td>
</tr>
<tr>
<td>Psychology</td>
<td>725</td>
</tr>
</tbody>
</table>

   At what percentile of the national average do these scores fall? Does this graduate school seem difficult to get into?

5) If you decided that you wanted to try to have GRE scores in the 75th % overall—competitive scores, but not ensuring you admission—what GRE scores would you have to shoot for?
**Answers**

1)  
   - Verbal: 665.04
   - Quantitative: 734.60
   - Analytical: 1054.2
   - Psychology: 722.08

2)  
   First, the standard deviation is very large, suggesting that people accepted to graduate school have a wide range of scores on the measure. Secondly, the upper limit of the 95% CI is outside the range of the scale, suggesting that it has limited usefulness in distinguishing who is suitable for graduate school.

3)  
   - Verbal: 472.96
   - Quantitative: 499.40
   - Analytical: 289.80
   - Psychology: 533.92

4)  
   - Verbal: $z = 1.45$, 43rd % from the mean, 93rd % overall
   - Quantitative: $z = 1.05$, 35th % from the mean, 85th % overall
   - Analytical: $z = -0.06$, -2nd % from the mean, 52nd % overall
   - Psychology: $z = 2.02$, 48th % from the mean, 98th % overall

   In general, this school is looking for a mix of scores, but since 3 of the 4 subtests are in the 85th percentile or above, we might conclude that it is relatively difficult to get into this school.

5)  
   - Verbal: 602.08
   - Quantitative: 657.50
   - Analytical: 803.63
   - Psychology: 660.40