Problem​ ​Statement​ ​1:

You take the SAT and score 1100. The mean score for the SAT is 1026 and the standard

deviation is 209. How well did you score on the test compared to the average test taker?

Step 1: Write your X-value into the z-score equation. For this sample question the X-value is your SAT score, 1100

Z=1100-µ/σ

Step 2: Write the mean, μ, into the z-score equation.

Z=1100-1026/σ

Step 3: Write the standard deviation, σ into the z-score equation.

Z=1100-1026/209

=0.354

This means that your score was .354 standard deviations above the mean.