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Math 5710 Monday, 7/06/20 Quiz 10

1. What is your name?

   Brock Francom

2. Up to this point in our Math 5710 class we have mostly focused on sample spaces that are discrete rather than continuous. Furthermore when a teacher communicates a test score to a student (e.g., Anna), the score is typically considered to be a unique number (e.g., 71). However, when the teacher applies the idea of a standard error of measurement to that score (e.g., 3.4), should we not think of that score as an interval (e.g., instead of thinking that $D_{\text{oAnna}} = 71$), we think of the score as a real number interval (e.g., $D_{\text{oAnna}} \in [\, 67.4, 10.5 \,]$)? And if that's the case, have we moved from the world of a discrete sample space to a continuous sample space?

   Please write a paragraph that addresses the two question in my note.

   I believe you could use that argument, but that would make the experiment much more complicated when it came to interpereting the results. It would not gain any more usefulness to make this switch, because a score of 10.000001 affects a grade in almost the same way a score of 10.0 would. Therefore, to make the Statistics easier, round all scores to 2 decimal places and use a discrete sample space.

3. Smile.