**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Making Inferences and Justifying Conclusions (S.IC.B)**

A research assistant randomly selected 75 undergraduate students from a list of all students enrolled in the psychology-degree program at a large university. She asked each of the 75 students, “How many minutes per day do you typically spend reading?” The mean reading time in the sample was 89 minutes, and the margin of error for this estimate was 4.28 minutes. Another research assistant intends to replicate the survey and will attempt to get a smaller margin of error. Which of the following samples will most likely result in a smaller margin of error for the estimated mean time students in the psychology-degree program read per day?

|  |  |  |
| --- | --- | --- |
| Statement | Yes or No | Explain your thinking |
| 1. 40 randomly selected undergraduate psychology-degree program students
 |  |  |
| 1. 40 randomly selected undergraduate students from all degree programs at the college
 |  |  |
| 1. 300 randomly selected undergraduate psychology-degree program students
 |  |  |
| 1. 300 randomly selected undergraduate students from all degree programs at the college
 |  |  |

Source:

SAT Released Items <https://collegereadiness.collegeboard.org/sample-questions/math/calculator-permitted/2>

Question 2, Calculator Permitted

Problem Solving and Data Analysis