Okay, let's tackle this question. Since I don't have access to the "table from 22," I will have to explain the process in detail, and then make an educated guess based on the nature of standard deviation calculations. My explanation will be thorough enough that you can apply it to whatever table you were given.

\*\*Understanding the Problem: Calculating Standard Deviation\*\*

The standard deviation is a crucial measure of data dispersion. It quantifies the spread or variability of a dataset around its mean. A larger standard deviation indicates a wider spread, while a smaller standard deviation suggests the data points are clustered more closely together. This is a core concept in introductory statistics.

The formula for the \*sample\* standard deviation (often the one calculated unless explicitly stated otherwise) is:

s = sqrt[ Σ(x<sub>i</sub> - x̄)<sup>2</sup> / (n - 1) ]

Where:

\* s = the sample standard deviation

\* Σ = summation (sum of...)

\* x<sub>i</sub> = each individual data point in the dataset

\* x̄ = the sample mean (average) of the dataset

\* n = the number of data points in the dataset

\* sqrt[] = square root

\*\*Steps for Calculating Standard Deviation (Using the Table from 22 - Hypothetically):\*\*

1. \*\*Determine the Data:\*\* First, you \*must\* have the data from "Table from 22". This table should contain either raw data points (individual values) or, in some cases, a frequency distribution (data grouped into intervals with their respective frequencies). Let's assume, for the sake of demonstration, that the table contains raw data. Let's say the data are 1, 2, 3, 4, and 5.

2. \*\*Calculate the Sample Mean (x̄):\*\* Sum up all the data points and divide by the total number of data points (n). In my example data:

x̄ = (1 + 2 + 3 + 4 + 5) / 5 = 3

3. \*\*Calculate Deviations from the Mean (x<sub>i</sub> - x̄):\*\* For each data point, subtract the mean. Using the example data:

\* 1 - 3 = -2

\* 2 - 3 = -1

\* 3 - 3 = 0

\* 4 - 3 = 1

\* 5 - 3 = 2

4. \*\*Square the Deviations ( (x<sub>i</sub> - x̄)<sup>2</sup> ):\*\* Square each of the deviations calculated in the previous step:

\* (-2)<sup>2</sup> = 4

\* (-1)<sup>2</sup> = 1

\* 0<sup>2</sup> = 0

\* 1<sup>2</sup> = 1

\* 2<sup>2</sup> = 4

5. \*\*Sum of Squared Deviations ( Σ(x<sub>i</sub> - x̄)<sup>2</sup> ):\*\* Add up all the squared deviations.

\* 4 + 1 + 0 + 1 + 4 = 10

6. \*\*Divide by (n - 1):\*\* Divide the sum of squared deviations by (n - 1). This is the sample variance.

\* 10 / (5 - 1) = 10 / 4 = 2.5

7. \*\*Take the Square Root:\*\* Finally, take the square root of the result from the previous step to get the standard deviation.

\* sqrt(2.5) ≈ 1.58

\*\*Applying to the Multiple Choice Options (and Making an Educated Guess):\*\*

Without the actual table, I can't perform the precise calculation. However, I can analyze the options and make an educated guess, keeping in mind the nature of standard deviation.

\* We know it's a measure of \*spread\*.

\* We know the steps (mean, deviations, squaring, summing, dividing, square rooting).

\* I calculated 1.58 based on a quick and simple example.

Based on these things, the answer is most likely to be (A) 1.46 or (B) 1.45. Given the distribution of the numbers (1,2,3,4,5), there can't be a high variance and so the standard deviation is low.

\*\*Answer\*\*

Given the constraints, the best choice, if the data in the table were similar in range and spread as the sample I provided, would be around (A) 1.46 or (B) 1.45.

\*\*Important Note:\*\* This is an educated guess \*based on the lack of the original data\*. You \*\*must\*\* use the data from the "Table from 22" to get the correct answer. This explanation equips you with the precise method to reach it.