

3.2b r^2 and s

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The screenshot shows a statistics quiz interface. At the top, there's a navigation bar with a bell icon, a dropdown menu for 'Statistics AP-Thompson-Year-12462 (66479)', a 'Residuals' link, and a user profile for 'Michael Brodskiy'. Below this, a progress bar shows '21 of 21 Questions' and an 'Assignment Score' of 98.1%. A sidebar on the left lists questions 16 through 21, all marked as 'Correct' with green progress bars. The main area displays 'Question 21 of 21' with a 'My Attempt' button. The question text reads: 'Measurements on young children in Mumbai, India, found this least-squares line for predicting $y = \text{height (in cm)}$ from $x = \text{arm span (in cm)}$: $\hat{y} = 6.4 + 0.93x$ '. Below this, it asks: 'Suppose that the measurements of arm span and height were converted from centimeters to meters by dividing each measurement by 100. How will this conversion affect the values of r^2 and s ?'. There are five radio button options:
1. r^2 will stay the same, s will stay the same.
2. r^2 will increase, s will increase.
3. r^2 will increase, s will stay the same.
4. r^2 will stay the same, s will decrease. (This option is selected)
5. r^2 will increase, s will decrease.
At the bottom of the question area, a green bar indicates 'Solved'.