Question 4 of 10

Using Chebyshev's theorem, solve these problems for a distribution with a mean of 78 and a standard deviation of 13. Round k to at least 2 decimal places and final answers to at least one decimal place if needed.

(a) At least what percentage of the values will fall between 52 and 104?

(b) At least what percentage of the values will fall between 57 and 99?

Part 1 of 2

At least _____ % of the values will fall between 52 and 104.

Part 2 of 2

At least _____ % of the values will fall between 57 and 99.

Question 5 of 10

SAT Scores The national average for mathematics on a standardized test in 2011 was 522. Suppose that the distribution of scores was approximatelys bell-shaped and that the standard deviation was approximately 43. Within what boundaries would you expect 99.7% of the scores to fall? What percentage of scores would be above 608?

(a) Within what boundaries would you expect 99.7% of the scores to fall?

(b) What percentage of scores would be above 608?

Part 1 of 2

(a) Within what boundaries would you expect 99.7% of the scores to fall?

About 99.7% of the scores should fall between _____ and _____ .

Part 2 of 2

(b) What percentage of scores would be above 608?

_____ % of the scores would be above 608.

Question 6 of 10

Sale Price of Homes The average sale price of new one-family houses in the United States for a recent year was $\$252{,}100$. Find the range of values in which at least 88.89% of the sale prices will lie if the standard deviation is $\$52{,}900$.

The range of values is between $ _____ and $ _____ .