

Stats /

Using the empirical rule to identify values and percentages of a normal...

Using the empirical rule to identify values and percentages of a normal distribution

Problem

Explanation

Show Another

Using the empirical rule to identify values and percentages of a normal distribution

QUESTION

The length of a movie file that is available for streaming is modeled using the normal distribution shown below. The mean of the distribution is 190.3 min and the standard deviation is 19.8 min.

In the figure, V is a number along the axis and is under the highest part of the curve. And, U and W are numbers along the axis that are each the same distance away from V .

Use the empirical rule to choose the best value for the percentage of the area under the curve that is shaded, and find the values of U , V , and W .

