

Answer on Question #47358 – Math – Statistics and Probability

Can a ratio variable be reduced to an ordinal variable?

Solution

Yes. Suppose we observe height (in). This is a ratio variable. We can reduce it to ordinal, by redefining it as height (short, medium, tall), where short means less than 60 inches, medium means between 60 and 72 inches, and tall means greater than 72 inches.

Can an ordinal variable be promoted to a ratio variable?

Solution

No. Variable “i” (example: restaurant rating (* to ****)) cannot become ratio because it lacks a real zero and equal intervals.

Can an ordinal variable be reduced to a nominal variable?

Solution

Yes. Variable “f” (example: university ranking) can be reduced to nominal (dummy coding: below average: 0; above average: 1).