Answer on Question #45477, Programming, Mat LAB | Mathematica | MathCAD | Maple

Question:

Matlab: Write a single program that calculates the arithmetic mean (average), rms average, geometric mean and harmonic mean for a set of n positive numbers. Your program should take two values xlow and xhigh and generate 10000 random numbers in the range [xlow…xhigh], and should print out arithmetic mean (average), rms average, geometric mean and harmonic mean.

Answer:

File average_values.m:

```
function [] = average_values (xlow, xhigh)

    random_numbers = random('unif', xlow, xhigh, 10000, 1);

    arithmetic_mean = mean(random_numbers)

    rms_average = rms(random_numbers)

    geometric_mean = geomean(random_numbers)

    harmonic_mean = harmmean(random_numbers)

end
```