Re: Basic statistics question

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- *From*: Ray <Canadianguy19441@xxxxxxxxx>
- *Date*: Sat, 14 Jul 2007 11:41:28 −0700

On Jul 14, 1:33?pm, Person <facetious_nickn...@xxxxxxxxxxx> wrote:

> OK, hypothetically, if I'm keeping track of my expenses, is there a statistically meaningful way of determining the effect that rounding towards the nearest dollar will have on the accuracy of the record−keeping? Upon what variables would this reckoning depend?
>
> Expressed plainly, if I record $1.49 as $1.00 and $1.50 as $2.00, will the roundings eventually cancel one another out?
>
> Perhaps this question cannot be answered as asked?
>
> Thanks, regardless.

If you round up and round down to the nearest dollar, the error in the sum diminishes as the length of the column of figures grows. In other words, if you create 2 columns of figures in a spreadsheet with 20 entries in each column using the actual figures in one column and the rounded up or down figures in the other column, you will have a certain percentage of error between the two sums. Now enter 40 figures, still rounding up or down only in the one column, and the percentage of error between the real sum and the rounded sum will be reduced. More data points lessens the error. However you will seldom achieve zero error.

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