In a paper by F. H. MacDougall and R. G. Green in the *Journal of Infectious Diseases* (1924, xxxiv, 195), the formula for the resistance is:

$$\frac{1}{R} = \frac{1-a}{M} + \frac{a}{S}$$

after translating one term into the conventions of MacDougall's paper. In a paper by Karl Lichtenecker on the resistance of certain composite conductors in the *Physikalische Zeitschrift*, 1918, xvii, 381, is given a formula which when translated into MacDougall's terms is:

$$R = \frac{SM}{(1-a)\,S + aM}$$

If we reduce MacDougall's equation to a common denominator we obtain

$$\frac{1}{R} = \frac{(1-a)\ S + aM}{SM}$$

and by taking the reciprocals of each side of this equation we obtain the equation used by Lichtenecker.

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HOW MANY FIGURES ARE SIGNIFICANT?

The readers of Science are aware that varying practices are followed by the workers in the natural and social sciences regarding the number of decimal places kept and reported in their investigations. A definite and uniform practice would conduce to general understanding. Discussions with my colleagues regarding certain quantitative studies of my own which promised to be serious and worth-while have become mired around the decimal point. As a result of this I have determined upon a rule for my personal guidance which I believe may be of general utility.

Determine the probable error of the measure involved, by statistical means if possible, otherwise estimate it. *Keep to the place indicated by the first figure of ½ the probable error.*

As an illustration, suppose we calculate the mean and standard deviation of a certain series and find:

Mean = 81.7433
Standard deviation = 12.8294
Population = 100
The probable error of the mean according to the usual formula = .865
The probable error of the standard deviation according to the usual formula = .612
½ the probable error of the mean = .432
½ the probable error of the standard deviation = .306

Following the rule, we would publish: Mean = 81.7 and the standard deviation = 12.8.

As a second illustration: Suppose we have a correlation coefficient of .75248 from a population of 400. Its probable error, according to the usual formula, is .0146. One half the probable error equals .0073. Accordingly, the correlation coefficient should be published as equal of .752.

The argument underlying this rule is that one should not throw away data that are likely to influence judgment. A difference of 1 probable error indicates that the chances are 3 to 1 that the difference is of the sign indicated. This is scant evidence of significance but not entirely meaningless. A difference of one half of the probable error indicates that the chances are about 5 to 3 that the difference is of the sign indicated. For ordinary purposes this is of insignificant moment. Failure to keep more figures introduces a slight error, but keeping them introduces a much greater error in interpretation by suggesting an accuracy which does not exist. It is necessary to strike a balance and the rule suggested is offered as a reasonable compromise.

It is intended that it be applied to raw or original measures or observations as well as to derived constants such as averages, measures of variability, etc. It is to be expected that computation work preceding publication will be carried to at least one figure further than the final published result.

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OPPORTUNITIES FOR SCIENCE TEACHERS IN NEW YORK HIGH SCHOOLS

A letter requesting information regarding opportunities for science teachers in the high schools of New York City was received by the writer some months ago from an associate professor in a large collegiate institution east of the Mississippi. The information furnished may be of interest to others and is outlined below. There is a real opportunity for important work, both in science education and in supplementary graduate work in science.

(1) There has been for some years a shortage of well-qualified teachers, especially of men for the boys' high schools. Three successive examinations in biology netted not more than three or four successful candidates, who were immediately appointed.

(2) The population of the New York City high schools stands at present at one hundred and ten thousand, and increases by thousands every year. All these ought to have several courses in science, and it appears that recognition of this fact is growing on the part of the administrative officials, and science work is entering a floodtide. At present between four and five hundred specially selected science teachers are required to offer the courses now given.

(3) The salary of the regular high school teacher,