

READER REFLECTIONS

In this section, we will share your reactions to articles and points of view on teaching and learning of mathematics. We appreciate your interest and value the views of those who write. The following articles have been submitted by readers for inclusion in this issue. Furthermore, two readers drew attention to the fact that in the May 1997 issue of delta-K (Volume 34, Number 1) several problem statements and answers provided in the article "Calendar Math" (pp. 34–35) were incorrect. The problems for which the answers were incorrect and the comments submitted by the readers are as follows:

Comments on "Calendar Math"

Problem 3: Susan drives from Calgary to Edmonton, a distance of 300 km, at a rate of 100 km/h. She drives back at a rate of 110 km/h. What was her average speed?

"The average speed is **not** determined by dividing the two speeds by the factor 2, as students will often do, but one has to take into account the fact that the car does not take the same amount of time to cover each part of the trip.

The average speed is the total distance divided by the total time.

Total distance is about 300 km each way.

Total time is $300 \text{ km}/100 \text{ km/h} + 300 \text{ km}/110 \text{ km/h} = 3.00 \text{ h} + 2.73 \text{ h} = 5.73 \text{ h}$. Average speed is $600 \text{ km}/5.73 \text{ h} = 104.71 \text{ km/h}$.

I suppose one could make the case that we might still round it off to 105 km/h, but it is instructive to teach students that constructing averages is not always simply arithmetically 'averaging' the numbers given."

*Wytze Brouwer
Department of Secondary Education
University of Alberta*

John Percevault, Professor of Education (Emeritus), University of Lethbridge submitted a similar comment on problem 3 as well as the following comments on problems 4, 15, 25 and 31.

Problem 4: Find the average of 151 whole numbers from 1–150, inclusive.

"Since when are there 151 whole numbers from 1–150, inclusive? This leads to the error in the answer."

Please note that it should read that there are 150 whole numbers from 1–150, inclusive. Hence, the answer should be $11,325 \div 150 = 75.5$.

Problem 15: Find a pattern and determine the next number in this series: 77, 49, 36, 18, ____.

"The sequence 77, 49, 36, 18, ____ can be developed consistently across the sequence by multiplying the digits of the digit numerals. The correct answer is then $1 \times 8 = 8$."

Problem 25: Jason has five friends at his birthday. To be polite, each person shakes hands with everyone else. How many handshakes will there be? (This is an excellent problem to solve by actual demonstration.)

"I can only assume that the instructions are ambiguous or the question is poorly worded. If the five invited guests are the only ones to shake hands, the answer of 10 is accepted. If each person shakes hands, the answer is 15. What is the intent?"

Problem 31: Put the appropriate signs between each of the following numbers so as to get an answer of 9.
 $8 \ 4 \ 2 \ 5 = 9$

"The answer which legitimately gives 9, does not correspond with the numerals given in the question."

One of the correct answers is $(8 \div 4) + 2 + 5 = 9$. Another correct answer is $8 + 4 + 2 - 5 = 9$.