

1035-Z1-1896

Jerome Dancis* (jnd@math.umd.edu), 5-H Laurel Hill Road, Greenbelt, MD 20770. *1. NCTM Focal Points for K-8 avoid 2-step Arithmetic Word Problems with Math content. 2. K-8 Math textbooks avoid Word Problems with Reading content.*

1. In 2006, National Council of Teachers of Mathematics (NCTM) (the professional society of school mathematics teachers) brought out its “Curriculum Focal Points for Mathematics in PreK - Grade 8”. (www.nctm.org/focalpoints/intro.asp)

Problem 1. The price of a loaf of bread is two dollars. The price of a large jar of milk is two dollars. Johnny buys one loaf of bread and one large jar of milk. He gives the cashier a five-dollar bill. What is the change? Two-step problems like Problem 1 are NOT mentioned until Grade 6.

I will discuss my “Grade by Grade Description of Appropriate Arithmetic Word Problems”. This list is Appendix B at www.ed.gov/about/bdscomm/list/mathpanel/5th-meeting/presentations/dancis-jerome.pdf.

I suggested that the Arithmetic word problems 6-12, therein, be included in the NCTM Curriculum Focal Points. Those types of problems are NOT listed for any grade.

2. K-8 Math textbooks avoid Word Problems with Reading content. In a middle school Math book, I read: “Three divided by six” can be directly translated into $3 \div 6$.

But there was no instruction for “three divides six”, which does NOT directly translate into $6 \div 3$, since the 3 and the 6 trade places. Also no problems like “three boys divide six pies”. (Received September 20, 2007)