



Author(s): Janet Peregoy			Lesson Title: A Taxing Problem			
Grade Span			ICLE Application Model			
K-4	5-8 xx	9-12	A	B	C	D xx

Instructional Focus:

Algebra—use algebraic methods in a problem-solving situation

Communication—communicate the solution with a specific audience in mind

Performance Task

You work at a furniture store. You have been working with two customers and have negotiated sales with both. With one customer you have agreed on a price of \$900 *plus tax* and with the other you have agreed on \$900 *including tax*. You must write sales tickets for both sales. The partially completed sales slips are shown as “A” and “B” below.

A

Price	\$900.00
6% Tax	_____
Total	_____

B

Price	_____
6% Tax	_____
Total	\$900.00

Your boss walked by as you were writing up ticket “A”, and asked you to develop a procedure that can be used by all employees when writing up tickets such as ticket “A”. Your procedure must be user-friendly and must not require complicated knowledge of algebra by the employees. Prepare a memo for your boss with the solution to this problem.

ICLE Essential Skills

Perform *operations with signed (positive and negative) numbers*, including decimals, ratios, percents, and fractions. (m 1)

Understand the *use of variables* in expressions such as $4x$, $x+2$, and $2x-1$, solve for the variable, and know how to represent expressions such as “twice the number” or “four more than the number” using variables. (m 7)

Writing: Draft a report that engages an audience and is concise, clear, well-organized, accurate, and informative. (ela 24)

Scoring Guide:

Criteria	4	3	2	1
Independence	The student independently completes the problem.	The student requires some help in completing the problem.	The student requires considerable help in completing the problem.	Even with help, the student does not complete the problem.
Problem Solving	The student's work shows a thorough, methodical plan, for solving the problem.	The student's work shows an adequate plan for solving the problem.	The student's work shows a plan for solving the problem.	The student's work shows that there was no real plan for solving the problem.
Accuracy of Solution	The solution is completely accurate.	There are some minor inaccuracies.	There are many inaccuracies.	The solution is completely inaccurate.
Communication	The solution to the problem is communicated in a clear and appropriate manner.	The solution to the problem is communicated in a somewhat clear and appropriate manner.	The solution is communicated in a confusing manner.	The solution is not communicated.

Keywords

English Language Arts	Mathematics	Science
Reading	Algebra Equations Math in Daily Life Problem Solving	Earth Science
Writing	Geometry	Life Science
Communications	Statistics	Chemistry
Literature	Calculus	Physics
Other Office Memo	Trigonometry	Other
	Other	