

Equity and Algebra for At-Risk Students

Susan L. Hillman
Saginaw Valley State University
shillman@svsu.edu
Becca Buchalter
Saginaw County Transition Academy
rkbuchalter@att.net

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Connections to Standards

- NCTM Algebra
- Common Core State Standards
 - Mathematical Practices:
 - Model with Mathematics
 - A-SSE Algebra: Seeing Structure in Expressions
 - A-CED Algebra: Creating Equations

Making the Invisible Visible

- Invisible “1”
- Structuring the work space
- Providing information in kid-friendly form (simplifying the language; explaining the specialized vocabulary)
- Making connections (not isolating skills)

First Example:

- Identifying the Parts of an Algebraic Expression
- Focusing in on vocabulary; pronunciation, recognition, and defining in user-friendly ways
- Taking apart and putting together expressions
- Making the invisible 1, visible

Second Example:

- Creating expressions with real-world contexts related to things familiar and interesting to the students
- Evaluating the expressions with student choice on numbers to use for evaluating the expressions
- Connecting expressions with patterns, models tables, and graphs
- Comparing situations in ways to show the power of “doing algebra”
- Making the invisible 1, visible

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Modeling the Real World with Algebraic Expressions

The real world situation is: _____

- Draw a diagram of this situation from 0 to 4.
- Fill in the first column of the table from 0 to 9. Use the description, or the diagram to fill in the third column of the table.
- Use the description, diagram or the table to write the algebraic expression that models this situation.
- Evaluate the algebraic expression for each x .
- Draw a graph representing this situation. Remember to label the graph.
- Figure out $x = \underline{\hspace{2cm}}$ and write a quanswer.

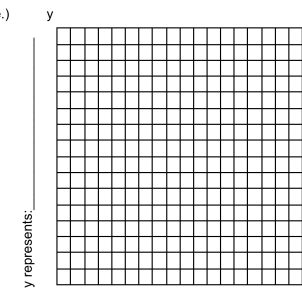
a.)

x	Algebraic Expression	y
b.) _____	c.) _____	b.) _____
	d.) _____	
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	d.) _____	

f.) _____

Quanswer: _____

e.)



y represents: _____

x represents: _____