

# Math 101, Littlefield

## Homework: Solving Mixture Problems By Goal Seek

Pick any two mixture problems, selected from recent homework assignments, in which you have set up and solved algebraic equations.

**Create Excel spreadsheets for those same two problems, and solve them numerically using Goal Seek.**

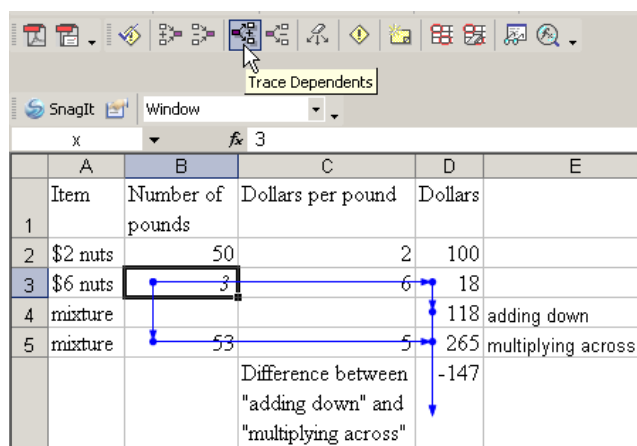
The spreadsheets that you create should be structured like the mixture problem in the Excel for Algebra Lesson 4 handout.

In other words, it should include:

- row and column labels
- some “input” cell that will contain the (initially) unknown quantity
- formulas that lead to an “output” cell whose desired value can be specified to Goal Seek.

**To hand in, I want two printouts like those on page 4 of the Excel for Algebra Lesson 4 handout. These printouts should show:**

1. **All the values, plus arrows drawn by the auditing toolbar, starting at the input cell and working forward to the output cell.** You can make this by selecting the input cell and pressing the Trace Dependents button several times, then printing. (Remember that you may have to turn on the Auditing Toolbar first.)
2. **All the formulas.** You can make this by typing ctrl-` and then printing. Please erase the auditing arrows first — they can make it very hard to read the formulas.



	A	B	C	D	E
1	Item	Number of pounds	Dollars per pound	Dollars	
2	\$2 nuts	50	2	100	
3	\$6 nuts	3	6	18	
4	mixture	53	5	118	adding down
5	mixture	53	5	265	multiplying across
			Difference between "adding down" and "multiplying across"	-147	

I don't really care whether these printouts show a test value for the input cell, or the value shown by Goal Seek. The key thing I want to see is arrows pointing where they're supposed to. The only way you can get those, is to have the formulas be correct.

Oh yes, one last thing. **Please tell me which problems you selected.** It'll make my life so much easier if I have to figure out whether something went wrong, and if so, what. 😊