

Assignment III: due Jan. 26

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January 22, 2009

Winter Quarter Algebra Initiative

1. In-out machines. Provide a rule for each of the following: Write the rule in an English sentence. Then fill in any question marks in the table.

In	Out
2	-6
-4	12
1.2	-3.6
?	2.7
-3	?
?	12
?	2π

In	Out
baby	A
John	I
market	S
bandana	O
aardvaark	s
bobbin	?

2. Provide at least three rules for each of the following two tables.

In	Out
1	3
2	5

In	Out
5	16
-2	-5

Please turn over.

3. Solve the system of equations:

$$3x + 2y = 7 \quad (1)$$

$$6x + 4y = 5 \quad (2)$$

4. A function is given by the rule $y = 3x^2 - 4x + 2$. Here is a partial in-out table. Use the trace and zoom features of your graphing calculator to fill in the blanks. Where the out value is given find all possible in-values that will give the desired out. If there aren't any, say none. Give answers to two decimal places.

In	Out
-1	?
1.06	?
?	-3
?	1
?	2
8.32	?

5. Explain your answers do the questions as you would in class.

Page 411 of CME: do problems 3,4,5.

Page 422 of CME: do problems 2 and 3.

Page 424 of CME: do problem 9.